ORIGINAL

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BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR AUTHORITY TO ISSUE PROMISSORY NOTE(S) AND OTHER EVIDENCES OF INDEBTEDNESS PAYABLE AT PERIODS OF MORE THAN TWELVE MONTHS AFTER THE DATE OF ISSUANCE	Docket No. W-01651B-99-0351
IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR AN INCREASE IN ITS WATER RATES FOR CUSTOMERS WITHIN PIMA COUNTY, ARIZONA	A.C.C. - DOCKET CONTROL Docket No. W-01651B-99-0406

NOTICE OF FILING

Staff of the Arizona Corporation Commission hereby files the Testimony of Sonn Ahlbrecht, Linda Jaress, and John Chelus, of the Utilities Division, in the above-captioned matter.

RESPECTFULLY SUBMITTED this 1st day of December, 1999.

Robert J. Metli
Attorney, Legal Division
Arizona Corporation Commission
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By Angela Bennett

DIRECT
TESTIMONY OF

SONN S. AHLBRECHT
LINDA A. JARESS
JOHN A. CHELUS

DOCKET NOS. W-01651B-99-0351
W-01651B-99-0406

DECEMBER 1, 1999

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
Chairman
JIM IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner

IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR AUTHORITY TO ISSUE PROMISSORY NOTE(S) AND OTHER EVIDENCES OF INDEBTEDNESS PAYABLE AT PERIODS OF MORE THAN TWELVE MONTHS AFTER THE DATE OF ISSUANCE	)	DOCKET NO. W-01651B-99-0351
IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A RATE INCREASE	)	DOCKET NO. W-01651B-99-0406

DIRECT

TESTIMONY

OF

SONN S. AHLBRECHT

AUDITOR III

UTILITIES DIVISION

DECEMBER 1, 1999

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SCHEDULES

INTRODUCTION

Q. Please state your name and business address.

A. My name is Sonn S. Ahlbrecht. My business address is 1200 West Washington, Phoenix, Arizona 85007.

Q. By whom are you employed and in what capacity?

A. I am employed by the Utilities Division of the Arizona Corporation Commission (Commission) as a Utilities Auditor III.

Q. Please describe your educational background and professional experience.

A. I obtained a Bachelor of Science Degree in Accounting in 1993 from Arizona State University. I became a Certified Public Accountant in the State of Arizona in July of 1997. I have attended training classes, and completed Continuing Professional Education courses regarding auditing, rate design, income taxes, and other utility related matters.

Q. Please describe your duties and responsibilities as a Utilities Auditor III.

A. My responsibilities include examination and verification of utility accounting records in conjunction with rate applications. I also analyze data for ratemaking purposes, evaluate the utility's current rate structure, propose rates and charges based on information analyzed during my regulatory audit, and prepare written reports or testimony, which include recommendations to the Commission. My responsibilities also include testifying at public hearings regarding audit findings and recommendations.

PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to present Staff's analysis and recommendations concerning Vail Water Company's ("Vail" or "Company") application for a permanent rate increase, officially docketed on July 19, 1999. My testimony will

address Original Cost Rate Base ("OCRB"), Test Year income statement adjustments, revenue requirements, and rate design.

Q. Was this testimony prepared by you or under your direction?

A. Yes, it was.

Q. What is the basis of Staff's recommendations?

A. Staff performed a regulatory audit of the Company's financial records to determine whether sufficient, relevant and reliable evidence exists to support Vail's claims in its rate application. The regulatory audit consisted of examining and testing account ledgers and financial statements, checking the accumulation of amounts in the records, tracing recorded amounts to source documents, verifying the correct application of data with applicable standards of third parties, and verifying that the accounting principles applied are in accordance with the Commission-adopted National Association of Regulatory Utility Commissioners' (NARUC) Uniform System of Accounts (USoA).

In addition, Staff engaged in discussions with Company representatives and made several written requests for data. Staff also made inquiries to other governmental agencies.

Q. What Test Year did the Company use in this filing?

A. Vail used as a historical Test Year the twelve months ending December 31, 1998. Pro forma adjustments were also proposed to both Original Cost Rate Base (Company Schedule B-2), and the Statement of Revenues and Expense (Company Schedule C-1). These adjustments consisted of items purported to be "used and useful" for purposes of the OCRB, and "known and measurable" for purposes of the Statement of Revenues and Expense.

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Q. Did Staff accept the Test Year as proposed by the Company?

A. Yes. However, Staff is proposing several adjustments in order to more accurately reflect Vail's current financial and operational position at the end of the Test Year.

Q. What is meant by "used and useful"?

A. In the context of rate regulation, "used and useful" means the plant in service must be a prudent investment and serve the public. However, the meaning of "used and useful" is subject to professional interpretation and judgement.

Q. What is meant by "known and measurable"?

A. In the context of rate regulation, "known and measurable" means that the effects on the company can be determined with reasonable certainty. However, the meaning of "known and measurable" is subject to professional interpretation and judgement.

Q. Does Staff disagree with any of the Company's pro forma adjustments?

A. Yes. The Company made a pro forma adjustment increasing its OCRB based upon a pending loan from the Water Infrastructure Financing Authority of Arizona ("WIFA"). The proceeds from this loan have not yet been received and invested in plant to meet the "used and useful" criteria at the end of the Test Year. In addition, the Company made additions and reductions to plant that were disallowed in the last rate proceeding, as well as including 1996 Construction Work in Process ("CWIP"), and CWIP for the Test Year. CWIP does not meet the "used and useful" criteria. These items will be discussed in more detail under the section entitled Original Cost Rate Base later in this testimony.

The Company also included several pro forma adjustments to the Statement of Revenues and Expense that Staff believes does not meet the criteria of "known and measurable". In addition, several expense items were removed that were part of on-going construction projects that should have been capitalized because they provide a benefit over a period

greater than one year. These items will be discussed in more detail later in this testimony, as well, under the section entitled Operating Expenses.

BACKGROUND

Q. Please briefly describe, in general, the Company's system and background.

A. Vail Water Company consists of two separate systems, the North System and the South System, each served by its own well. The North System is north of Interstate 10 and is served by the R-6 well. The Company was billing 27 customers on this well at the time of the Engineering Inspection on September 14, 1999, including the Del Lago Ranch house from which Vail rents office space for its three employees. In the 1996 rate case, the R-6 well was not considered "used and useful" in OCRB as it was deemed a private well used only to serve the Del Lago Ranch house.

The South System is located south of Pantano Wash and extends further south across Interstate 10. It is served by the R-3 well located on the north side of Interstate 10. A large main that bores under the freeway transports the water to these customers since there is very little water on the south side of Interstate 10. At the time of the Engineering Inspection, the Company was billing 708 customers on the South System, bringing the total number of customers to 735. This is a fifteen percent increase over the 639 total customers the Company had at the end of the Test Year, December 31, 1998.

The current owners purchased Vail Water Company on April 30, 1996. At that time, the Company operated as Del Lago Water Company; however, it became Vail Water Company on July 7, 1997. A group of investors currently own Vail, including majority owner BSE Trust, holding 15,952.25 shares and listing the same address as TEM Corp. Mr. William A. Estes, Jr. controls BSE Trust, and therefore, has 25 percent ownership of Vail Water Company.

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TEM Corp. is the management company that provides all administrative and accounting services for the utility outside of daily system operations, meter reading, billing, and collections. Mr. William A. Estes, Jr. is the 100 percent owner of TEM Corp.

Vail also filed a financing application (W-01651B-99-0351) that was consolidated with the rate increase application. The Company is seeking approval of an $819,000 loan from WIFA to inter-connect the two wells and upgrade existing facilities to provide the required capacity during peak times. In addition, $293,000 in stockholder loans for past and future operating expenses, and Central Arizona Project (CAP) charges are included in the financing application. The financing application was analyzed by, and will be addressed in the testimony of witness Linda Jaress.

SUMMARY OF PROPOSED REVENUE

Q. Would you briefly summarize the Company and Staff proposals?

A. Vail is requesting an increase in revenues of $318,356 or a 92.63 percent increase to its annualized and adjusted Test Year revenue, as reflected in Schedule SSA-1. The monthly customer bill based on average usage of 7,498 gallons would increase $38.67 from $42.52 to $81.19, or 90.9 percent, as depicted in Schedule SSA–7. The Company stated it needs this increase due to the fact that the total cost of operating the water company was not included in the last Commission Decision (No. 61110, dated August 28, 1998). According to the Company, Vail has insufficient cash flow to meet operating expenses and install essential water plant, and as a result, requested a revenue level adequate to service proposed debt, pay CAP water charges, and operate at a profit.

On June 23, 1999, in Docket No. W-01651B-99-0351, the Company requested approval to borrow $819,000 in long-term debt from WIFA, convert $150,000 in short-term stockholder loans to long-term debt, and $143,000 in long-term debt for anticipated

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operating losses, for total proposed debt of $1,112,000. Vail has included in proposed revenue an amount sufficient to service all proposed debt requested in the financing application.

Staff is recommending an annual revenue level of $423,783. This results in an increase in revenues of $88,086, or a 23.3 percent increase over annualized and adjusted Test Year revenue. The monthly customer bill based on average usage of 7,498 gallons would increase $8.47 from $42.52 to $50.99, or 19.9 percent, as depicted in Schedule SSA-7.

ORIGINAL COST RATE BASE

Q. Has Staff prepared a schedule detailing the components and amounts representing the Company's proposed and Staff's adjusted OCRB?

A. Yes. Please refer to Schedule SSA-2.

Q. Is Staff recommending any changes to the Company's proposed OCRB?

A. Yes. The Company proposed OCRB of $1,046,979. Staff is recommending an OCRB of $113,613, resulting in a total reduction to rate base of $933,366, as itemized in Adjustments A through G.

Q. Has the Company prepared a schedule showing the elements of Reconstruction Cost New Rate Base (RCND)?

A. No. The Company did not file any RCND schedules. Consequently, the RCND information not filed is deemed waived according to Commission rules. Therefore, OCRB is the same as Fair Value Rate Base (FVRB).

Q. Please explain Staff's adjustments to Plant in Service.

A. Staff's adjustments to Plant in Service resulted in a decrease of $827,205 (Adjustment A, Schedule SSA-2), as itemized in Schedule SSA-3, Adjustments A through J.

The Structures & Improvements plant account was increased by $428 in Adjustment A to capitalize engineering services improperly recorded as an expense.

The Wells & Springs plant account was also increased to capitalize engineering services improperly recorded as an expense in the amount of $9,710, Adjustment B.

The Electric Pumping Equipment plant account has a net increase of $6,289. Included in Adjustment C is an increase of $6,378 to capitalize engineering services recorded as an expense, and a decrease of $89 to remove an adjustment disallowed in the previous rate proceeding.

The Transmission & Distribution Mains plant account was increased by $7,337 as a result of Adjustment D. This is due to the capitalization of engineering services improperly recorded as an expense in the amount of $6,614 from Outside Services – Other, and $723 to capitalize items recorded as an expense in Supplies – Transmission & Distribution mains.

Adjustment E increased the Meters plant account by $88 to remove a reduction disallowed in the last rate case, and $1 due to rounding.

The Other Plant & Miscellaneous Equipment plant account was increased by $2,701 in Adjustment F as a result of capitalizing engineering services recorded as an expense.

Adjustment G increased the Transportation Equipment plant account by $1,007 to replace an adjustment disallowed in the prior rate proceeding.

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Adjustment H increased the Tools & Work Equipment plant account in the amount of $827 to capitalize items improperly recorded as an expense in Supplies – Maintenance General Plant.

The CWIP from the 1996 Rate Case in the amount of $36,593 was removed in Adjustment I. Per the Company response to Staff's Fifth Data Request, on January 15, 1997, $26,160 of this amount was placed in service and transferred to the appropriate plant accounts. The remaining $10,433 was placed in service on June 24, 1998, when the entire CWIP account balance of $254,107 was transferred to Plant in Service. This amount needs to be removed so it is not double counted; once in plant in service accounts, and again in the CWIP account.

Adjustment J removes the pro forma adjustment in the amount of $819,000 including proposed plant to be built with the proceeds from a loan from WIFA. Since the Company has not begun to draw on the loan, and as a result, has not placed plant in service, Staff does not deem this amount to be considered "used and useful".

Q. Please explain Staff's adjustment to Accumulated Depreciation.

A. Staff decreased Accumulated Depreciation by $5,773 as reflected in Adjustment B on Schedule SSA-2. The calculation for Accumulated Depreciation begins on Schedule SSA-4 with the amount approved in the last rate proceeding (Decision No. 61110) of $370,557, and adds depreciation expense for 1997 and 1998 in the amounts of $61,013 and $69,417, respectively, to arrive at Staff Adjusted Accumulated Depreciation of $500,987. The difference between Staff and the Company is the result of adjustments Staff made to Plant in Service accounts.

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Q. Please explain Staff's adjustment to Amortization of CIAC.

A. Staff reduced Amortization of CIAC by $142 as depicted in Adjustment C on Schedule SSA-2. This difference results from amortizing contributions for 1998 at five percent until September 1, 1998, when the new depreciation rates went into effect. Contributions were then amortized at the same rate as the corresponding depreciation rate for the asset placed in service with the contributed money. The Company amortized contributions at a composite rate of 2.58 percent, resulting in the difference from Staff's amount.

Q. Did Staff make an adjustment to Advances in Aid of Construction ("Advances" or "AIAC")?

A. Yes. Staff increased the amount of Advances reflected in OCRB by $21,900 in Adjustment D. Vail had reduced AIAC by $35,650 for Advance amounts received that were not part of plant in service. Of this amount, $21,900 was determined to be related to Line Extension Agreement #42 included in the 1999 pro forma plant allowed in OCRB. For matching purposes, Advances needs to be adjusted to reflect the corresponding plant in service.

Q. Please explain Staff's adjustment to Prepaid Water Rights.

A. Staff removed the Company's allotment of Prepaid Water Rights in the amount of $70,188 in Adjustment E. Staff has allowed recovery of this amount through amortization over twenty years on the Income Statement as the Company requested. Allowing a rate of return on the unamortized portion of the prepaid CAP expenses would result in double recovery both from rate base, and as a direct expense on the income statement through amortization.

Q. Please explain Staff's adjustment to WIFA Reserve Fund.

A. Staff disallowed $13,870 in OCRB as reflected in Adjustment F. Please see the testimony of witness Linda Jaress for further information.

Q. Please explain Staff's adjustment to Allowance for Working Capital.

A. Staff's reduction of $5,834 in Adjustment G was predicated upon Staff's adjustments to operating expenses as depicted in the Income Statement (Schedule SSA-5).

OPERATING REVENUE

Q. Did Staff prepare a schedule representative of the Company's and Staff's Test Year revenues?

A. Yes. Please refer to Schedule SSA-5.

Q. Is Staff recommending any changes to the Company's Test Year operating revenue?

A. No. Staff accepted the Company's annualized Test Year revenue.

Q. Is Staff recommending any changes to the Company's Proposed operating revenue?

A. Yes. Staff is recommending reducing proposed revenue by $238,270 from the Company requested level as reflected in Adjustment A. Based on audit results, Staff believes operating revenue of $423,783 is sufficient to cover operating expenses and proposed debt service. In addition, Staff will recommend restricting certain elements of revenue via surcharges and set-aside accounts to service CAP charges and WIFA debt exclusively.

OPERATING EXPENSES

Q. Did Staff prepare a schedule representative of the Company's and Staff's Test Year expenses?

A. Yes. Please refer to Schedule SSA-5.

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Q. Is Staff recommending any changes to the Company's proposed operating expenses?

A. Yes. The Company proposed operating expenses of $540,499. Staff is recommending operating expenses of $372,204, or a difference of $168,295, as itemized in Adjustments B through N.

Q. What is Staff's adjustment to Salary expense account?

A. Staff increased this account by $4,536 in Adjustment B. Staff determined the Company needed $78,001 in expense for payroll and the related taxes, based on 1999 salary amounts provided by Vail. Included in this amount is $71,306 for salaries; $670 for Arizona State Unemployment taxes at .94 percent; $5,455 for FICA taxes at 7.65 percent; and $570 for Federal Unemployment taxes at .8 percent.

Q. Please explain Staff's adjustment to Purchased CAP Water and CAP Recharge Expense.

A. Adjustment C consisted of two adjustments to arrive at a net expense amount Staff determined the Company should be allowed to recover in rates. Staff decreased Purchased CAP Water by $65,611, and increased CAP Recharge expense by $3,930 to arrive at the $19,277 cost recoverable in rates.

Vail included $84,888 of estimated annual CAP cost comprised of $37,728 of Holding costs, and $47,160 of Municipal & Industrial ("M & I") costs the Company will begin to incur once the CAP allocation is utilized. This amount is offset by $3,930 (786 acre feet times $5 per acre foot) that Vail will be reimbursed by Kai Farms for use of the Company's CAP allocation. Kai Farms will receive Vail's CAP water directly for use in agriculture in lieu of pumping groundwater, and will reimburse a portion of Vail's costs for that usage. This results in $80,958 of remaining expense to recover.

Staff has determined this expense should not be borne by the current customer base alone, due to the fact that current customers require annualized gallons of 61,012,124.

The Company's CAP allocation of 786 acre-feet equates to 256,236,000 gallons, substantially higher than current demand. Since current customer demand amounts to approximately 23.81 percent of the CAP allocation, the Company should only be allowed to recover that percentage of this expense from current customers in the new rate structure, or $19,277.

The balance, $61,681, will be recovered via a two-part cost recovery mechanism. The first part of cost recovery is through the CAP Hookup Tariff as described by witness John Chelus in his testimony and Engineering Report (Schedule JC-1). Staff is recommending a CAP Hookup Fee ($1,000 for a 5/8" x 3/4" meter) for all new subdivisions and line extensions for future customers of Vail. This will place the responsibility for the majority of the CAP expense on the new developments driving the need for the CAP allocation. All CAP Hookup Fees are to be classified as Contributions and deposited into an interest bearing account separate from Vail's general cash.

The second part of cost recovery is through a CAP Expense Recovery Charge. Each month on customer billings, there should be a line item for CAP Recovery Fee in the amount of $0.32 per thousand gallons. The funds from this line item should also be deposited in the separate cash account; however, funds from the surcharge are considered revenue, not Contributions. When Vail pays their CAP allocation, payment must be tendered from the CAP cash account and the Company is not allowed to expense more than $19,277 on the income statement each year. The balance of the CAP allocation payment will reduce funds received from CAP Hookup fees, and correspondingly reduce Contributions.

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Q. Please explain Staff's adjustment to Purchased Pumping Power.

A. Staff removed $955 from this expense account in Adjustment D. This amount represents a pro forma adjustment made by the Company to annualize expenses based on customer growth during the Test Year. Staff accepted the pro forma adjustment; however, $252 should have been classified as Repairs & Maintenance Expense, and $703 as Office Supplies Expense as reflected in Adjustments F and G.

Q. Please explain Staff's adjustment to Water Testing Expense.

A. Staff increased this expense by $2,473 as reflected in Adjustment E. This increase was necessary to reflect the Staff Engineering recommended annual expense level of $3,662 as stated within the testimony of witness John Chelus.

Q. Please explain Staff's adjustment to Repairs & Maintenance Expense.

A. Adjustment F increased this expense account by $252. This is the result of a pro forma adjustment reclassified from Purchased Pumping Power (Adjustment D) to annualize expenses based on customer growth during the Test Year.

Q. What is Staff's adjustment to Office Supplies?

A. Staff increased this expense by $703 as reflected in Adjustment G. This is the result of a pro forma adjustment reclassified from Purchased Pumping Power (Adjustment D) to annualize expenses based on customer growth during the Test Year.

Q. Please explain Staff's adjustment to Outside Services.

A. Staff decreased this expense by $39,800. Adjustment H consisted of several decreases to Contractual Services – Other for engineering consulting services provided to Vail totaling $39,800. Services in the amount of $25,830 were determined to be related to plant already in service, and therefore, were capitalized in the Test Year and depreciated. An additional $12,262 in consulting services was determined to be related to Plant in

Service; however, the projects associated with this amount are still considered CWIP, so are not included in rate base since they are not yet "used and useful". The balance of the adjustment, or $1,708, relating to Cieniga Creek was removed as it was determined to be non-utility related.

Q. Please explain Staff's adjustment to Rate Case Expense.

A. As reflected in Adjustment I, this expense category was reduced by $5,000 from $25,000 as requested by Vail, to Staff's recommended $20,000. Staff arrived at this amount by referring to the Decision in the prior rate proceeding (Decision No. 61110). At that time, the Company was allowed $60,000 in Rate Case Expense, to be amortized at the rate of $1,250 per month, or $15,000 annually. Decision No. 61110 went into effect on September 1, 1998, resulting in $5,000 in amortization for 1998 and $15,000 for 1999. Staff also amortized Rate Case Expense for January through April of 2000 in the amount of $5,000, based on the new rates going into effect May 1, 2000. This leaves $35,000 of unamortized expense remaining at the time new rates go into effect. Staff added current rate case expense of $45,000 to arrive at $80,000 total expense to be amortized over four years, resulting in expense of $20,000 annually.

Q. What is Staff's adjustment to General Insurance?

A. Staff reduced this expense by $874 in Adjustment J to reflect the actual amount of the invoice received from The Grundy Agency during the Test Year.

Q. Did Staff make an adjustment to Health & Life Insurance?

A. Yes. In Adjustment K, Staff removed the Company's pro forma adjustment in the amount of $118. The Company made this adjustment based on a projected increase in health insurance costs of two percent. Staff recommends disallowing this adjustment, as it is not "known and measurable".

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Q. Please explain Staff's adjustment to Miscellaneous Operating Expenses.

A. Staff reduced this expense category by $8,759. Adjustment L consisted of several decreases including $723 transferred to Transmission and Distribution Mains plant account, and $827 reclassified to Tools & Work Equipment. The balance, $7,209, were pro forma adjustments made by the Company deemed not "known and measurable". Included in the pro forma adjustment were $6,000 for auto lease expense; the Company disclosed that the owners invested cash to purchase this auto in May of 1999. Also disallowed were $300 for an additional cellular phone, $420 for a fax line, and $489 for an estimated 20 percent increase in auto fuel.

Q. Please explain Staff's adjustment to Property Taxes.

A. Staff decreased this expense in Adjustment M by $32,289 to reflect the actual 1998 property tax bills paid in the amount of $14,624, and to reject the Company's pro forma adjustment of $19,524.

Q. Please explain Staff's rejection of the Company's pro forma adjustment to Property Taxes due to Increased Rates.

A. Staff disallowed the Company's pro forma adjustment increasing property taxes by $19,524. The Company's calculation was based on its proposed increase in rates. However, Staff believes estimates used to calculate the adjustment are not "known and measurable", and accordingly, removed the Company's pro forma adjustment. It is Staff's position that the best estimate of property taxes is to use the actual bill for the most current year.

Q. Please explain Staff's adjustment to Depreciation Expense.

A. Staff reduced this expense category by $26,783 in Adjustment N. This adjustment represents the plant in service at the end of the Test Year depreciated at the various rates authorized in Decision No. 61110, totaling $53,257 in depreciation expense. Staff

reduced this amount by $9,163 to account for amortization of contributions at the same rate the related assets placed in service are depreciated. Staff disallowed the Company's request to include pro forma depreciation expense for plant to be installed with the proceeds from the WIFA loan due to the fact that pro forma plant in service was not allowed in OCRB.

Q. What was Staff's adjustment to Interest Expense?

A. Interest expense was decreased by $30,215. Adjustment O reduces Interest expense to $46,596, the amount allowed based on the portions of the financing application approved by witness Linda Jaress.

REVENUE REQUIREMENT AND RATE DESIGN

Q. Has Staff prepared a schedule representative of the Company's and Staff's proposed rates and charges?

A. Yes. Please refer to Schedule SSA-6.

Q. Please explain Staff's proposed rate design for Vail.

A. Staff's recommended rates will produce $420,442 in revenue through metered water sales, and $3,341 in other water revenues that are necessary to cover operating expenses and service the proposed WIFA debt. These rates would generate a positive cash flow of approximately $99,368, operating income of $51,579, and net income of $5,694.

Proposed rates are comprised of many elements including surcharges and set-aside accounts to ensure that the Company is not unduly enriched by the substantial increases in its customer base from development. Staff believes the use of separate cash accounts restricted to pay only certain obligations will better allow the Commission to track revenues allowed for those obligations. As in the case of Vail, the utility is going to experience continued substantial growth over the next several years, resulting in

collection of increased revenue that will only be designated to pay Commission approved items. As a result, these elements of rates should be reviewed for appropriateness in each of Vail's subsequent rate case proceedings.

In addition to the normal rates and charges for monthly usage and commodity charges, Staff recommends a per household WIFA surcharge of $8.45. This amount is to be deposited in an interest bearing account separate from the Company's general cash, and can only be used to pay WIFA. The surcharge amount was based on the amount of cash required annually of $82,807 to pay the debt service and the reserve requirement. This amount was equally divided among the estimated customer population of 818 at May 1, 2000, the earliest the rates could become effective. The customer base of 818 was calculated by using actual customers per the Company at November 30, 1999 of 770, and adding the amount of additions based on the Engineering forecast of 115 new customers per year, annualized for five months, or 48.

Staff will also recommend the commodity based CAP Recovery fee of $0.32 per thousand gallons. This surcharge should also be set aside from general revenue in another separate interest bearing cash account to be used only to pay CAP water charges. Staff will also recommend approval of the CAP Hookup Fee Tariff with the thirteen conditions of implementation as delineated in the testimony of witness John Chelus.

Q. How long will the WIFA surcharge remain in effect?

A. The appropriateness and magnitude of the WIFA surcharge will be evaluated in each rate case proceeding until the debt is paid in full.

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Q. How long will the CAP Recovery commodity fee remain in effect?

A. The CAP Recovery fee will remain in effect until the Company's entire CAP water allocation is deemed "used and useful" to the customers of Vail. At that time, CAP recovery costs may be incorporated into permanent rates.

STAFF RECOMMENDATIONS

Q. Please summarize Staff's recommendations in this proceeding.

A. Staff recommends that the Commission approve the rates and charges as depicted on Schedule SSA-6.

Staff further recommends that the Commission approve the Central Arizona Project Hook-Up Fee Tariff along with the thirteen conditions of implementation as listed in the Engineering Report provided by witness John Chelus.

Staff further recommends that the $0.32 per thousand gallons surcharge be set aside in a separate and different interest bearing account to be used solely for the purpose of paying CAP holding and M & I charges. The Company should also deposit proceeds from the CAP Hook-up Fee Tariff in this account. The CAP Hook-up Fees resulting from line extensions and new developments will be treated as Contributions. This special purpose account should be reviewed for appropriateness in each subsequent rate case proceeding.

Staff further recommends approval of the WIFA loan in the amount of $819,000.

Staff further recommends that the $8.45 per month surcharge per customer be set aside in a separate interest bearing account to be used solely for the purpose of servicing the WIFA debt. This special purpose account should be reviewed for appropriateness in each subsequent rate case proceeding.

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Staff further recommends that the Company be authorized an operating income of $51,579 based on Staff's adjustments to rate base and operating expenses.

Staff further recommends a fair value rate of return of 45.4 percent on Staff's proposed OCRB of $113,613.

Staff further recommends a provision be included in the Company's tariff to allow for the flow-through of all appropriate state and local taxes as provided for in A.A.C. R14-2-409(D)(5).

Q. Does this conclude your direct testimony?

A. Yes, it does.

VAIL WATER COMPANY
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

Schedule SSA-1

SUMMARY OF FILING

LINE NO.	DESCRIPTION	PRESENT RATES COMPANY AS FILED	PRESENT RATES STAFF ADJUSTED	PROPOSED RATES COMPANY AS FILED	PROPOSED RATES STAFF ADJUSTED
	REVENUES:				
1	Metered Sales	$ 340,356	$ 340,356	$ 658,712	$ 420,442
2	Private Fire Protection	-	-	-	-
3	Other Operating Revenue	3,341	3,341	3,341	3,341
4	**TOTAL OPERATING REVENUE**	**$ 343,697**	**$ 343,697**	**$ 662,053**	**$ 423,783**
	OPERATING EXPENSES:				
5	Operation and Maintenance	$ 422,708	$ 375,699	$ 422,708	$ 313,485
6	Depreciation	70,878	70,878	70,878	44,095
7	Taxes Other than Income	27,389	14,624	46,913	14,624
8	Income Tax	-	-	-	-
9	**TOTAL OPERATING EXPENSES**	**$ 520,975**	**$ 461,201**	**$ 540,499**	**$ 372,204**
10	**OPERATING INCOME/(LOSS)**	**$ (177,278)**	**$ (117,504)**	**$ 121,554**	**$ 51,579**

VAIL WATER COMPANY
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

Schedule SSA-2

ORIGINAL COST RATE BASE

LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	REF	STAFF ADJUSTED
1	Gross Utility Plant in Service	$ 2,967,388	$ (827,205)	A	$ 2,140,183
	Less:				
2	Accumulated Depreciation	506,760	(5,773)	B	500,987
3	Net Utility Plant in Service	$ 2,460,628	$ (821,432)		$ 1,639,196
	Less:				
4	Contributions in Aid of Construction	$ 359,686	$ -		359,686
	Less:				
5	Amortization of CIAC	(176,823)	$ 142	C	(176,681)
6	Net CIAC	182,863	142		183,005
	Plus/(Less):				
7	Advances in Aid of Construction	$ (1,320,085)	$ (21,900)	D	(1,341,985)
8	Meter Deposits	(37,895)	-		$ (37,895)
9	Prepaid Water Rights	70,188	(70,188)	E	-
10	WIFA Reserve Fund	13,870	(13,870)	F	-
11	Allowance for Working Capital	43,136	(5,834)	G	37,302
12	**ORIGINAL COST RATE BASE**	**$ 1,046,979**	**$ (933,366)**		**$ 113,613**

A - See Schedule SSA-3

VAIL WATER COMPANY **Schedule SSA-3**
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

PLANT IN SERVICE

LINE NO.	ACCT NO	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	REF	STAFF ADJUSTED
1	303	Land & Land Rights	$ 3,500	$ -		$ 3,500
2	304	Structures & Improvements	61,770	428	A	62,198
3	307	Wells & Springs	145,736	9,710	B	155,446
4	311	Electric Pumping Equipment	289,392	6,289	C	295,681
5	320	Water Treatment Equipment	-	-		-
6	330	Distribution Reservoirs	118,072	-		118,072
7	331	Transmission & Distribution-Mains	1,405,829	7,337	D	1,413,166
8	333	Services	15,376	-		15,376
9	334	Meters	105,685	89	E	105,774
10	339	Other Plant & Misc. Equipment	-	2,701	F	2,701
11	340	Office Furniture & Equipment	4,039	-		4,039
12	341	Transportation Equipment	32,900	1,007	G	33,907
13	343	Tools and Work Equipment	-	827	H	827
14		1983 ACC Adjustment to Plant	(149,395)	-		(149,395)
15		CWIP from 1996 Rate Case	36,593	(36,593)	I	-
16		Pro Forma 1999 Plant in Service	78,891	-		78,891
17		WIFA Loan Improvements	819,000	(819,000)	J	-
18		**TOTALS**	**2,967,388**	**(827,205)**		**2,140,183**

VAIL WATER COMPANY
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

Schedule SSA-4

ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	REF	STAFF ADJUSTED
1	Original Cost	$ 506,760	$ (5,773)	A	$ 500,987

Computation to arrive at Adjustment A:

Accumulated Depreciation Balance-Test Year Ended 12/31/96 as approved in Decision 61110:		$ 370,557
Add:		
Depreciation Expense for 1997	$ 61,013	
Depreciation Expense for 1998	69,417	130,430

Staff determined Accumulated Depreciation at December 31, 1998	**$ 500,987**

VAIL WATER COMPANY
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

INCOME STATEMENT

LINE NO.	DESCRIPTION	[A] PRESENT RATES COMPANY AS FILED	[B] PRESENT RATES STAFF ADJTS	REF	[C] PRESENT RATES STAFF ADJUSTED	[D] PROPOSED RATES COMPANY AS FILED	[E] PROPOSED RATES STAFF ADJTS	REF	[F] PROPOSED RATES STAFF ADJUSTED
	OPERATING REVENUES:								
1	Metered Water Sales	$ 340,356	$ -		$ 340,356	$ 658,712	$ (238,270)	A	$ 420,442
2	Private Fire Protection	-	-		-	-	-		-
3	Other Water Revenues	3,341	-		3,341	3,341	-		3,341
4	**Total Operating Revenues**	$ 343,697	$ -		$ 343,697	$ 662,053	$ (238,270)		$ 423,783
	OPERATING EXPENSES:								
5	Salaries	$ 73,465	$ -		$ 73,465	$ 73,465	$ 4,536	B	$ 78,001
6	Purchased CAP Water	84,888	-		84,888	84,888	(65,611)	C	19,277
7	CAP Recharge Expense	(3,930)	-		(3,930)	(3,930)	3,930	C	-
8	Purchased Pumping Power	43,307	(955)		42,352	43,307	(955)	D	42,352
9	Water Testing	1,189	-		1,189	1,189	2,473	E	3,662
10	Water Treatment	874	-		874	874	-		874
11	Repairs & Maintenance	6,974	252		7,226	6,974	252	F	7,226
12	Office Supplies	19,468	703		20,171	19,468	703	G	20,171
13	Outside Services	123,384	(39,800)		83,584	123,384	(39,600)	H	83,584
14	Rate Case Expense	25,000	-		25,000	25,000	(5,000)	I	20,000
15	Rent	6,000	-		6,000	6,000	-		6,000
16	Transportation Expenses	3,600	-		3,600	3,600	-		3,600
17	General Insurance	14,425	-		14,425	14,425	(874)	J	13,551
18	Health & Life Insurance	6,062	-		6,062	6,062	(118)	K	5,944
19	Miscellaneous Operating Expenses	14,308	(7,209)		7,099	14,308	(8,759)	L	5,549
20	Property Taxes	27,389	(12,765)		14,624	46,913	(32,289)	M	14,624
21	Depreciation	70,878	-		70,878	70,878	(26,783)	N	44,095
22	Amortization of Prepaid Water Rights	3,694	-		3,694	3,694	-		3,694
23	Income Tax Expense	-	-		-	-	-		-
24	**Total Operating Expenses:**	$ 520,975	$ (59,774)		$ 461,201	$ 540,499	$ (168,295)		$ 372,204
25	**OPERATING INCOME (LOSS)**	$ (177,278)	$ 59,774		$ (117,504)	$ 121,554	$ (69,975)		$ 51,579
26	Other Income/Expenses:								
27	Other Income	711	-		711	711	-		711
28	Interest Expense	76,811	(29,877)		46,934	76,811	(30,215)	O	46,596
29	Total Other Income/Expenses	76,100	(29,877)		46,223	76,100	(30,215)		45,885
30	**NET INCOME**	**$ (253,378)**	**89,651**		**$ (163,727)**	**$ 45,454**	**$ (39,760)**		**$ 5,694**

STAFF ADJUSTMENTS

A -	Metered Water Sales	- Per Company	$ 658,712	
		- Per Staff	420,442	$ (238,270)
	To reduce Water Sales to reflect the Staff recommended level sufficient to meet operating expenses and cover debt service.			
B -	Salaries	- Per Company	$ 73,465	
		- Per Staff	78,001	$ 4,536
	To increase Salary Expense to 1999 level as provided by the company, and increase related payroll taxes.			
C -	Purchased CAP Water	- Per Company	$ 84,888	
		- Per Staff	19,277	$ (65,611)
	CAP Recharge Expense	- Per Company	$ (3,930)	
		- Per Staff	-	$ 3,930
	To adjust the two CAP related expense accounts to amount determined to be recoverable in rates.			
D -	Purchased Pumping Power	- Per Company	$ 43,307	
		- Per Staff	42,352	$ (955)
	To reclassify Company proforma adjustments to correct expense accounts. Included is $252 to Repairs & Maintenance, and $703 to Office Supplies Expense.			
E -	Water Testing	- Per Company	$ 1,189	
		- Per Staff	3,662	$ 2,473
	To increase expense to Staff Engineering's recommended annual level.			

STAFF ADJUSTMENTS

F -	Repairs & Maintenance	- Per Company	$	6,974	
		- Per Staff		7,226	$ 252
	To increase expense due to proforma adjustment reclassified from Purchased Pumping Power.				
G -	Office Supplies	- Per Company	$	19,468	
		- Per Staff		20,171	$ 703
	To increase expense due to proforma adjustment reclassified from Purchased Pumping Power.				
H -	Outside Services	- Per Company	$	123,384	
		- Per Staff		83,584	$ (39,800)
	The following amounts were transferred from Outside Services - Other to the specified plant in service accounts:				
	Structures & Improvements			428	
	Wells & Springs			9,710	
	Electric Pumping Equipment			6,378	
	Transmission & Distribution Mains			6,614	
	Other Plant & Miscellaneous Equipment			2,701	
	Transferred from Outside Services - Other to CWIP due to plant not in service at end of Test Year			12,262	
	Removed non-utility related expense incurred for Cieniga Creek			1,707	
	TOTAL ADJUSTMENT			39,800	
I -	Rate Case Expense	- Per Company	$	25,000	
		- Per Staff		20,000	$ (5,000)
	To reduce expense to reflect amortization of rate case expense until new rates are put into effect approximately May of 2000.				

STAFF ADJUSTMENTS

J -	General Insurance	- Per Company	$	14,425	
		- Per Staff		13,551	$ (874)

To decrease expense to reflect amount of actual invoice received from The Grundy Agency during the Test Year.

K -	Health & Life Insurance	- Per Company	$	6,062	
		- Per Staff		5,944	$ (118)

To remove proforma expense by Company - not "known and measurable".

L -	Misc Operating Expenses	- Per Company	$	14,308	
		- Per Staff		5,549	$ (8,759)

This expense was reduced as itemized below:

Amount reclassified to Trans/Dist Mains	$	723
Amount reclassified to Tools & Work Equip.		827
The following proforma adjustments did not meet the criteria of "known and measurable":		
Auto lease @ $500 per month		6,000
Additional cellular phone @ $25 per month		300
Fax line @ $35 per month		420
20% increase in auto fuel		489
TOTAL ADJUSTMENT	$	8,759

M -	Property Taxes	- Per Company	$	46,913	
		- Per Staff		14,624	$ (32,289)

To decrease expense to reflect amount of actual property tax billings for Test Year 1998.

STAFF ADJUSTMENTS

N -	Depreciation Expense	- Per Company	$ 70,878	
		- Per Staff	44,095	$ (26,783)

To adjust expense based on Staff's adjustments to plant in service, and to reflect proper expense based on change in depreciation rates on 9/1/98.

O -	Interest Expense	- Per Company	$ 76,811	
		- Per Staff	46,596	$ (30,215)

To decrease interest expense to reflect proposed interest on the WIFA loan of $819,000.

VAIL WATER COMPANY **Schedule SSA-6**
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

RATE DESIGN

LINE NO.		PRESENT RATES	PROPOSED RATES COMPANY	PROPOSED RATES STAFF
	MONTHLY USAGE CHARGE			
1	5/8 X 3/4 - Inch Meter	$ 14.40	$ 27.20	$ 11.05
2	3/4 - " "	14.40	27.20	20.80
3	1 - " "	19.00	69.25	40.30
4	1- 1/2 - " "	25.00	138.50	89.05
5	2 - " "	46.00	221.60	147.55
6	3 - " "	67.50	443.20	284.05
7	4 - " "	100.00	692.50	479.05
8	6 - " "	280.00	1,385.00	966.55
9	WIFA Surcharge	-	-	8.45
10	Sprinkler Rate	[a]	[e]	[e]
11	Gallons included in minimum	0	0	0
12	Excess of minimum - per 1,000 gallons	$ 3.75	$ 7.20	$ 3.88
13	CAP Recovery Fee - per 1,000 gallons	$ -	$ -	$ 0.32
	SERVICE LINE AND METER INSTALLATION CHARGE			
14	5/8 X 3/4 - Inch Meter	$ 400.00	$ 400.00	$ 400.00
15	3/4 - " "	440.00	440.00	440.00
16	1 - " "	500.00	500.00	500.00
17	1- 1/2 - " "	675.00	675.00	675.00
18	2 - " " Compound	1,660.00	1,660.00	1,660.00
19	3 - " " Compound	2,150.00	2,150.00	2,150.00
20	4 - " " Compound	3,135.00	3,135.00	3,135.00
21	6 - " " Compound	6,190.00	6,190.00	6,190.00
	SERVICE CHARGES			
22	Establishment	$ 25.00	$ 25.00	$ 25.00
23	Establishment - After Hours	50.00	50.00	50.00
24	Reconnection (Delinquent)	30.00	30.00	30.00
25	Reconnection (Delinquent-After Hours)	35.00	35.00	35.00
26	NSF Check	25.00	25.00	25.00
27	Meter Re-read (If correct)	15.00	15.00	15.00
28	Meter Test (If correct)	30.00	30.00	30.00
29	Deposit	[b]	[b]	[b]
30	Deposit Interest	[b]	6.00%	[b]
31	Re-Establishment (Within 12 months)	[c]	[c]	[c]
32	Re-Establishment (Within 12 months After Hours))	[d]	[d]	[d]
33	Deferred Payment - Per month	1.50%	1.50%	1.50%
34	Late Payment Penalty	1.50%	1.50%	1.50%
35	Moving Customer Meter (Customer Request)	Cost	Cost	Cost
36	Illegal Hook-up	[f]	[g]	[g]
37	Transfer Fee	25.00	25.00	25.00

[a] Higher of $5.00 per month or 1.00 percent of Monthly Minimum
[b] Per Commission rule A.A.C. R14-2-403(B)
[c] Months off the system times monthly minimum per Commission rule A.A.C. R14-2-403(D)
[d] Months off the system times monthly minimum per Commission rule A.A.C. R14-2-403(D) plus $25.00
[e] Higher of $7.00 per month or 2.00 percent of Monthly Minimum
[f] 1% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than $5.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.
[g] Billings from time illegal connection was made to date, plus $100.00

Vail Water Company
Docket No. W-01651B-99-0406
Test Year Ended December 31, 1998

Schedule SSA-7

TYPICAL BILL ANALYSIS
General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 588

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	7,498	$42.52	$81.19	$38.67	90.9%
Median Usage	5,256	$34.11	$65.05	$30.93	90.7%
Staff Proposed					
Average Usage	7,498	$42.52	$50.99	$8.47	19.9%
Median Usage	5,256	$34.11	$41.58	$7.47	21.9%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$14.40	$27.20	88.9%	$19.50	35.4%
1,000	18.15	34.40	89.5%	23.70	30.6%
2,000	21.90	41.60	90.0%	27.90	27.4%
3,000	25.65	48.80	90.3%	32.10	25.1%
4,000	29.40	56.00	90.5%	36.30	23.5%
5,000	33.15	63.20	90.6%	40.50	22.2%
6,000	36.90	70.40	90.8%	44.70	21.1%
7,000	40.65	77.60	90.9%	48.90	20.3%
8,000	44.40	84.80	91.0%	53.10	19.6%
9,000	48.15	92.00	91.1%	57.30	19.0%
10,000	51.90	99.20	91.1%	61.50	18.5%
12,000	59.40	113.60	91.2%	69.90	17.7%
14,000	66.90	128.00	91.3%	78.30	17.0%
16,000	74.40	142.40	91.4%	86.70	16.5%
18,000	81.90	156.80	91.5%	95.10	16.1%
20,000	89.40	171.20	91.5%	103.50	15.8%
25,000	108.15	207.20	91.6%	124.50	15.1%

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
Chairman
JIM IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner

IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR AUTHORITY TO ISSUE PROMISSORY NOTE(S) AND OTHER EVIDENCES OF INDEBTEDNESS PAYABLE AT PERIODS OF MORE THAN TWELVE MONTHS AFTER THE DATE OF ISSUANCE	DOCKET NO. W-01651B-99-0351
IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A RATE INCREASE	DOCKET NO. W-01651B-99-0406

DIRECT TESTIMONY OF LINDA A. JARESS

MANAGER, FINANCIAL ANALYSIS

UTILITIES DIVISION

DECEMBER 1, 1999

SM0500T

TABLE OF CONTENTS

INTRODUCTION

Q. Please state your name and business address.

A. My name is Linda A. Jaress. My business address is 1200 West Washington, Phoenix, Arizona 85007.

Q. Please state your educational background and professional experience.

A. I received a Bachelor of Arts Degree from Michigan State University and a Master of Business Administration Degree from the University of Hawaii. I was a Research Analyst for the Hawaii Trucking Association during 1977 and 1978 and a Financial Analyst for the State of Hawaii, Division of Consumer Advocacy from 1980 to 1985. In 1985, I was employed by the Arizona Corporation Commission (Commission) as a Senior Rate Analyst and was promoted to Manager, Financial Analysis in 1991. I also served as the Acting Chief of the Accounting and Rates Section for six months in 1997.

Q. Please list your duties and responsibilities.

A. I supervise three analysts. I am responsible for preparing and presenting testimony and Staff Reports on various finance-related issues. These issues include cost of capital testimony for Staff in utility rate cases. I am also responsible for analyzing the financial condition of utilities and preparing reports and recommendations regarding mergers, asset purchases, Affiliated Interest Rule filings and applications for approval of financing.

Q. What is the scope of your testimony in this case?

A. I will provide analysis and recommendations regarding capital structure, the costs of debt and equity and the cost of capital to be used as the rate of return on rate base for Vail Water Company (Vail).

...

...

...

REQUEST FOR APPROVAL OF LONG-TERM DEBT

Q. Please describe the Company's request for approval of long-term debt.

A. The Company is requesting approval of $819,000 of debt from the Water Infrastructure Finance Authority of Arizona (WIFA) and approval to convert $293,000 of short-term loans from shareholders to long-term debt.

Q. Please describe the components of the $293,000 of short-term debt the Company is requesting be converted to long-term debt.

A. According to Page 2 of Mr. Kozoman's direct testimony in the financing docket, the Vail shareholders loaned the Company approximately $150,000 to cover "historic operating expenses". On Page 3, he explains the additional $143,000 of requested debt as an "estimate of operating expenses" for which the company will need to borrow funds to pay "...prior to receiving the rate relief which it has requested..."

Q. Has the Commission addressed this same issue in Vail's last rate case?

A. Yes, Decision No. 61110, dated August 28, 1998, addressed the requested conversion of $90,000 in short-term notes from shareholders into long-term debt. The debt was similarly "...incurred primarily to cover operating shortfall. "The Commission denied the requested financing saying that "In general, shareholders should cover operating shortfalls with equity infusions instead of long-term debt financing. Consequently we deny the Company's requested financing." Furthermore, Arizona Revised Statutes section 40-302A. prohibits the use of debt to pay operating expenses without prior Commission approval

Q. Do you believe that Decision No. 61110 is relevant to this case?

A. Yes. I do. To my knowledge, there are no unusual circumstances in this case which would make the previous decision inapplicable. Furthermore, operating losses should be born by shareholders especially when some of the shareholders and their affiliates are

developers or landowners within the certificated area who may benefit from lower rates through land sales.

Finally, converting losses to debt presents an inequity among customers. As new customers are added, their rates would include not only the cost of their service but the cost of service provided to customers who received service several years previously.

Q. What is your recommendation regarding the shareholder loans?

A. I recommend the Commission deny the request for approval of the shareholder loans and that the Company be allowed to account for the test-year loans of $150,000 as paid-in capital.

Q. How will the funds from the proposed WIFA loan be used?

A. The WIFA loan funds will be used to build a chlorination facility, upgrade and rebuild booster stations and construct 6,700 feet of 12-inch diameter distribution line. Staff Engineering has reviewed these projects and believes them to be necessary and has determined the cost estimates to be reasonable.

Q. What are the terms of the WIFA loan?

A. The payments will be monthly at an interest rate of 5.81 percent and the loan will mature in 20 years. Total annual principal and interest payments will be $69,337. WIFA also requires an amount equal to one-fifth of the annual payments to be placed in a reserve account each year. In Vail's case, the annual payments to the reserve account will be $13,870. The reserve account serves to enhance the security of the loan and can be drawn upon by WIFA in the event of default. The balance of the reserve account will be applied to the loan payments when the loan nears maturity. The reserve account earns interest (last year's average interest rate earned on WIFA reserve accounts was 5.9 percent), 10.0 percent of which is retained by WIFA as a fee.

Q. What is your recommendation regarding the WIFA loan?

A. I believe that the loan is consistent with sound financial practices and the purposes of the loan are in the public interest. I recommend approval of the $819,000 WIFA loan with a maturity of 20 years and an interest rate of 5.81 percent or whatever the applicable WIFA rate is at the time the loan documents are finalized.

CAPITAL STRUCTURE

Q. What capital structure did Vail report to the Commission in its Annual Report to the Corporation Commission?

A. Vail reported negative equity of $23,444, $217,560 of short-term debt, $0 long-term debt and $1,532,668 of advances and contributions on December 31, 1998. However, for ratemaking purposes, the Commission does not include short-term debt or advances and contributions as part of the permanent capital invested in the company by investors. Thus, the Company's capital structure was essentially 100.0 percent equity.

Q. What capital structure results from approval of the WIFA loan and denial of the shareholder loans?

A. The capital structure that results from the proposed financing and the Company's negative equity is not meaningful. However, if Staff's recommended rate base is used as the equity component and Staff's recommended WIFA debt as the debt component, the capital structure would be approximately 93.0 percent debt and 7.0 percent equity. If the conversion of the requested $150,000 of test-year short-term debt to paid-in capital is included in equity, the capital structure would equal 79.6 percent debt and 20.4 percent equity.

However, the use of this capital structure in the determination of a return on rate base may not yield a return that creates an amount of cash flow that will cover the significant debt service required by the WIFA loan.

Q. Does Staff ordinarily recommend approval of debt that results in a capital structure so heavily weighted toward debt?

A. No. Staff believes that under general conditions a highly leveraged capital structure creates too much risk. However, because of the recent availability of relatively inexpensive funds from WIFA, Staff has been recommending approval of debt which results in uneconomic capital structures and the Commission has approved such debt several times. In addition, Staff often recommends approval of WIFA debt even when it results in highly leveraged capital structures because the debt is for projects which improve service and/or increase the quality and safety of the water provided to the customers. Staff believes that the availability and ease of access to the WIFA funds helps motivate water companies who have been reluctant to invest their own funds in their companies to make these improvements sooner than they otherwise would. Thus, the benefits of the debt outweigh the disadvantages experienced in ratemaking and the upward pressure on rates caused by the debt service and reserve requirement related to the WIFA loans.

Q. What capital structure are you recommending?

A. Because the revenue requirement in this case will be highly dependent upon debt service requirements and return on rate base rather than capital structure, I recommend that the Commission not adopt a particular capital structure in this case. If the Commission were to adopt a capital structure, it would either be hypothetical and/or not meaningful. Generally, this Commission does not adopt hypothetical capital structures.

If the Commission does adopt a capital structure in this case, I recommend a capital structure of 75.7 percent debt (comprised entirely of the proposed $819,000 WIFA debt) and 24.3 percent of equity (comprised of Staff's rate base of $113,613 and $150,000 of paid-in capital from the conversion of short-term debt into paid-in capital).

. . .

COST OF LONG-TERM DEBT

Q. What cost of debt are you recommending?

A. I am recommending a cost of debt of 5.7 percent. This represents the first year's interest payments on the WIFA debt less interest earned for the first year on the WIFA reserve fund, divided by $819,000, the principal amount of the WIFA loan. I assumed interest on the WIFA reserve fund to be 5.9 percent less the 10.0 percent WIFA fee.

COST OF EQUITY AND RATE OF RETURN ON RATE BASE

Q. How will you determine the appropriate return on common equity for Vail?

A. Because the proportion of equity in the capital structure is small, even a large percentage return may not generate enough cash to cover interest and principal payments on the debt or to make refunds of the advances in aid of construction. Thus, I recommend a return on equity and a resulting rate of return that will generate sufficient cash to make timely payments on the company's obligations instead of performing a discounted cash flow or capital asset pricing model analysis.

Q. Is this consistent with the Company's application?

A. Yes, it is. On Page 20 of Mr. Kozoman's direct testimony, he says, "the equity return is a function of the needed debt service and interest coverage." And on Page 22, "In the instant case, the equity return requested is needed for debt coverage." His Exhibit Schedule D-4 also illustrates that the return on equity was applied to "invested" capital and was based on interest coverage and debt service.

Q. What coverages does Mr. Kozoman propose that revenues generate?

A. He is recommending debt service coverage of 1.24 and interest coverage of 1.58.

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Q. What cost of equity are you recommending?

A. I am recommending that the cost of equity be a percentage that results in a weighted cost of capital which, when used as a rate of return on rate base, generates at least a 1.20 debt service coverage.

Q. How do you compute a Debt Service Coverage (DSC) ratio?

A. The numerator is equal to operating income plus depreciation. The denominator is one year of interest, principal, and reserve deposit. The ratio shows the number of times the company's cash, after expenses, covers debt service.

Q. How did you determine that a 1.20 coverage will result in a fair return on equity and rate base?

A. WIFA requires that a company achieve a 1.2 coverage to qualify for loan funds. That amount of coverage will result in complete payment of principal, interest and reserve account deposits with 20.0 percent of the total of those payments as a cushion and income for shareholders.

Q. If the Commission allows a return on rate base that results in a fixed charge coverage of 1.20 including deposits in the reserve fund, does the WIFA reserve fund need to be reflected in rate base?

A. No, it does not. If the customers' rates are set to recover the WIFA reserve deposit dollar for dollar, then the deposit should not also earn a return.

Q. What operating income are you recommending and how did you compute it?

A. The debt service and the net deposits to the WIFA debt reserve account during the first year of the debt will equal $82,807. To reach a fixed charge coverage of 1.20, operating income plus depreciation and amortization must equal $82,807 times 1.20 or $99,368.

Staff's proposed depreciation and amortization total $47,789. Thus, to achieve 1.20 coverage, operating income needs to be $51,579 ($99,368 less $47,789).

Q. What rate of return on rate base are you recommending?

A. I am recommending a return on fair value rate base of 45.4 percent (operating income of $51,579 over fair value rate base of $113,613).

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
Chairman
JIM IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner

IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR AUTHORITY TO ISSUE PROMISSORY NOTE(S) AND OTHER EVIDENCES OF INDEBTEDNESS PAYABLE AT PERIODS OF MORE THAN TWELVE MONTHS AFTER THE DATE OF ISSUANCE	DOCKET NO. W-01651B-99-0351
IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A RATE INCREASE	DOCKET NO. W-01651B-99-0406

DIRECT

TESTIMONY

OF

JOHN A. CHELUS

UTILITIES CONSULTANT

UTILITIES DIVISION

DECEMBER 1, 1999

TABLE OF CONTENTS

SCHEDULES

INTRODUCTION

Q. Please state your name and business address.

A. My name is John A. Chelus. My business address is 1200 West Washington Street, Phoenix, Arizona, 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Utilities Division of the Arizona Corporation Commission (Commission) as a Utilities Consultant/Water-Wastewater Engineer.

Q. How long have you held this position?

A. Since September 1990.

Q. What are your responsibilities as a Utilities Consultant/Water-Wastewater Engineer?

A. Among other responsibilities, I inspect, investigate, and evaluate water and wastewater systems; obtain data, prepare original cost studies, and investigative reports; suggest corrective action and provide technical recommendations on water and wastewater system deficiencies; and provide written and oral testimony on rate and other cases before the Commission.

Q. How many water and sewer companies have you analyzed for the Utilities Division?

A. I have analyzed 70 plus companies in various capacities for the Utilities Division.

Q. Have you testified before the Commission previously?

A. Yes, I have.

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Q. What is your educational background?

A. I graduated from the Rochester Institute of Technology in 1976 with a Bachelor Degree in Civil Engineering and from Oklahoma State University in 1978 with a Masters Degree in Environmental Engineering.

Q. Briefly describe your pertinent work experience.

A. I worked for the Dallas Water Utilities as an engineer in the Wastewater Division, and then the Engineering Design Division from 1978 to 1981. I then moved to Grand Junction, Colorado, and first worked for Multi Mineral Corporation as a research engineer until 1982. I then worked for Westwater Engineering Consultants as a design engineer. In 1983, I was employed by Sauter Construction as a construction engineer for the construction of the Ute Water Treatment facilities in Palisade, Colorado. In 1984 and 1985, I was employed by the City of Grand Junction as a Grade IV wastewater operator at their 12 million gallon per day activated sludge treatment facility. In 1986, I moved to Phoenix and began working for the Arizona Department of Environmental Quality (ADEQ), Office of Water Quality, first as a design review engineer, and then as a field engineer. I stayed at ADEQ until transferring to the Commission in 1990.

Q. Were you assigned to provide an engineering evaluation of Vail Water Company for this rate proceeding?

A. Yes.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to present the findings of my engineering evaluation of the Vail Water Company (Vail or Company). Those findings are contained in the Engineering Report, which I have prepared for this proceeding. The report is included as Schedule JC-1 as detailed in the list of schedules.

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Q. How is the remainder of your testimony organized?

A. For the remainder of the testimony, I will discuss other pertinent issues and summarize my recommendations.

DESCRIPTION OF ENGINEERING REPORT

Q. Would you briefly describe what was involved in preparing the Engineering Report for the Company in this rate proceeding?

A. I received a compliance data report for the Vail water system supplied by Pima County, and physically inspected the system to determine which plant items listed by the Company in the application were used and useful. I contacted the Arizona Department of Water Resources (ADWR) to determine if the water system complied with ADWR requirements. I also obtained information from the Company regarding growth over the past few years, water usage data, water quality data, service areas, Central Arizona Project (CAP) allocations, etc. Based on this information, I made my evaluation and prepared my Engineering Report.

Q. Does Schedule JC-1 accurately describe Vail Water Company as you found it during your investigation?

A. Yes, to the best of my knowledge.

Q. Would you describe the information contained in your Engineering Report for the Water system, Schedule JC-1?

A. Schedule JC-1 is divided into eight sections:

A. PURPOSE OF REPORT

B. LOCATION OF COMPANY

C. DESCRIPTION OF COMPANY

D. WATER USE

...

E. GROWTH PROJECTIONS

F. PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE

G. ARIZONA DEPARTMENT OF WATER RESOURCES COMPLIANCE

H. OTHER.

Section A. Purpose of Report, states the reason for the preparation of the Engineering Report and provides the date of and the persons conducting the on-site inspection.

Section B. Location of Company, gives the location of the system within the State.

Section C, Description of Company, describes the Company's plant in service at the time of my inspection.

Section D. Water Use, contains figures showing the water use on the system.

Section E. Growth Projections, shows and discusses potential customer growth based on the number of customers listed in the Company's Annual Reports and through discussions with the Company.

Section F. Pima County Department of Environmental Quality , discusses the Company's compliance status with Pima County and the Arizona Department of Environmental Quality.

Section G. Arizona Department of Water Resources Compliance, discusses the Company's compliance with ADWR.

Section H, Other, discusses other issues related to the Company.

Q. When did you inspect the Company water system?

A. As stated in my Engineering Report, I inspected the system on September 14, 1999.

Q. In what condition did you find the facilities?

A. The facilities were in good condition and well maintained by the operations staff. The Company is actively making improvements to wells, storage tanks and boosters systems, such as upgrading booster pump stations, well pumps and controls. The Company is adding to and/or upgrading its distribution system as needed.

Q. Does the Engineering Report describe the plant as you found it during your inspection?

A. Yes. As detailed in Section C, there are two separate systems. The north system serves approximately 27 customers. It consists of one well, two storage tanks, two pressure tanks, two transfer pumps, two booster pumps and distribution system. The south system serves approximately 630 customers. It consists of one well, four storage tanks, eight pressure tanks, two surge tanks, twelve booster pumps, two transfer pumps and distribution system.

Q. Did you find that all plant items were used and useful?

A. Yes. All facilities included in the Company application in their original cost rate base were found to be used and useful.

Q. Did you evaluate water usage data provided by the Company?

A. Yes. The Company provided monthly data for the system during the December 31, 1998 Test Tear. This information is detailed in Section D of my Engineering Report.

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Q. Did you evaluate water loss from the system?

A. Yes. Section H of the Engineering Report states that water loss on the system was 16 percent during the Test Year. This amount of water loss is slightly higher than the 10 percent Engineering considers reasonable. Engineering recommends that the Company reduce its water loss to less than 10 percent within one year of the Commission decision as detailed in the Engineering Report.

Q. Did you evaluate customer growth?

A. Yes. I used data supplied by the Company in its annual reports and application as well as from conversations with the Company. This data was plotted and then a projection was made of what the growth rate might be in the near future. This information is detailed in Section E of the Engineering Report.

Q. Is the Company in compliance with the Arizona Department of Environmental Quality and the Pima County Department of Environmental Quality requirements?

A. The system has no maximum contaminant level (MCL) violations and is serving water, which Pima County and ADEQ has determined meets the Safe Drinking Water Act quality standards. This is described in Section F of the Engineering Report.

Q. Is the Company in compliance with the ADWR?

A. The Company is complying with all requirements as I have stated in Section G of the Engineering Report.

Q. Do you recommend recovery of water testing costs to comply with the Safe Drinking Water Act?

A. Yes. I recommend a cost per year of $3,662 as described in Section H of my Engineering Report.

. . .

Q. Did you review the Company request for approval of financing for a number of major upgrades and new construction?

A. Yes. The Company is requesting approval to finance $819,000 in construction for various projects. The funding is being sought from the Water Infrastructure Financing Authority of Arizona (WIFA). A list of projects is provided in the Engineering Report in Section H.

Q. Do you recommend approval of the financing request for $819,000?

A. Yes.

Q. How do you propose that the Company recover the costs associated with the financing?

A. Through a flat monthly surcharge to all customers based on meter size. This money should be placed in a separate interest bearing account to be used only for repayment of the WIFA loan.

Q. Did you review the original cost that the Company included in rate base for Well No. 6?

A. Yes. The Company included $91,686 in original cost rate base for Well No. 6 that was recently put in service. The details are explained in Section H of the Engineering Report.

Q. Did you review the plan the Company is proposing for the use of its 786 acre-foot per year allocation of Central Arizona Project (CAP) water?

A. Yes. My analysis and comments are included in Section H of the Engineering Report.

Q. Do you agree with the Company's plan?

A. Yes, although the CAP water will be recharged some 60 miles north of the Vail CC&N, the plan provides an indirect benefit to customers in that the water is being recharged into the same aquifer and gives the Company an interim option until they can develop a plan for direct use.

Q What method are you recommending for the recovery of CAP costs?

A. I am recommending that the Company recover costs related to the holding and recharge of their CAP allocation through the implementation of a CAP service fee based on customer usage and a CAP hookup fee for all new line extensions and subdivisions. The details of this plan can be found in Section H of the Engineering Report as well as in Attachment A, which is a sample CAP hookup fee tariff.

SUMMARY OF ENGINEERING STAFF RECOMMENDATIONS

Q. Please summarize your recommendations.

A.

1. Engineering recommends that the Company reduce its water loss to less than 10 percent within one year of the Commission Decision. If the water loss cannot be reduced to less than 10 percent, the Company must submit justification to the Utilities Division Director as to why doing so would not be cost effective.

2. Engineering recommends recovery of $3,662 per year for water quality monitoring costs.

3. The Company has placed $91,686 into rate base for Well No. 6. Engineering considers the cost reasonable.

4. Engineering considers the request to finance of $819,000 from WIFA for major plant upgrades and new construction as necessary and important to improving the reliability and quality of service to all customers. Engineering recommends that a surcharge, set aside or something similar be approved which will provide debt service for the construction projects.

5. Engineering believes that it is important that the Company retain its Central Arizona Project (CAP) allocation as long as it is eventually delivered directly to Vail water customers. The costs related to the CAP allocation should be shared by all current and future ratepayers. In order to facilitate the Company's interim plan, Engineering proposes the following cost recovery mechanisms:

   a. Implementation of a CAP Service fee based on customer usage.

   b. Implementation of a CAP Hookup Fee for all-new line extensions and subdivisions.

Q. Does this conclude your direct testimony?

A. Yes, it does.

ENGINEERING REPORT
FOR
VAIL WATER COMPANY
DOCKET NO. W-1651B-99-0406
&
DOCKET NO. W-1651B-99-0351

A. PURPOSE OF REPORT

This report was prepared in response to a rate application filed by Vail Water Company (Company)(formerly Del Lago Water Company) as well as a financing application which in part will be used to finance plant improvements. John A. Chelus, Utilities Consultant, and Sonn Ahlbrecht, Auditor, inspected the water system on September 14, 1999. Bill McGuire, Manager/Operator, and Charlotte Kimball, Office Coordinator, represented the Company.

B. LOCATION OF COMPANY

The Company is located in Pima County about 15 miles southeast of Tucson on Interstate-10. The Certificate of Convenience and Necessity (CC&N) is situated in and around Vail, Arizona and covers an area of over 10,000 acres on both sides of the interstate. It commences on the northwest one mile east of Houghton Road and extends southeasterly along the general alignment of the Pantano Wash and the Southern Pacific Railroad, approximately six miles. In a north-south direction it extends about 8 miles from two miles north of the Pantano Wash to its southerly boundary at Sahuarita Road. Figures 1 & 2 describe the location of the Company within Pima County and in relation to other Commission regulated companies. The Company has an application filed under Docket No. W-01651B-99-0018 to extend its CC&N to two more areas.

C. DESCRIPTION OF SYSTEMS

There are two separate systems serving customers. The north system serves approximately 27 residential customers. It consists of one well, two storage tanks, two pressure tanks, two transfer pumps, two booster pumps, and distribution system. The south system serves approximately 630 customers. It consists of one well, four storage tanks, eight pressure tanks, two surge tanks, twelve booster pumps, two transfer pumps and distribution system.

The Company is in the process of developing the north system to serve all planned development in the north part of the CC&N. Ranch Well 6, which had previously been a private ranch well, has been upgraded and is now online. The Company has also added a new storage and booster site to the north system called Vail Valley Ranch Storage and Booster. There are plans for additional wells and storage in the near future.

The Company is in the process of designing an interconnect between the north and south systems to increase reliability and provide another source of water to the south system.

The following tables and Figure 3 describe the systems in more detail.

South System

Well Site No. 3

Well No. 3 is located about ¾ of a mile southeast of the Vail post office on the north side of Success Drive. This is the only well serving the south system. This site consists of one well, one storage tank, one pressure tank, one surge tank and two booster pumps. This site provides service to a small number of local customers and transfers water to the higher elevation Well No. 2 reservoir. Well No. 3 is located near the southern boundary of the major groundwater aquifer for this area.

Well Site No. 2 Storage & Booster Station

This site is located about two miles southeast of Well No. 3. This site consists of one storage tank, one pressure tank, one surge tank, two booster pumps, and two transfer pumps. Well No. 2 is not used because of its low production and poor water quality. This site transfers water to the Andrada storage reservoir and the Golos storage reservoir. It also provides water to the Patterson Booster Station and provides water directly to a small number of local customers, both commercial and residential, on the north side of I-10 between the Vail and Mountain View Interchanges.

Andrada Booster & Storage

This site is located approximately two and one half miles southwest of Well Site No. 2 on the south side of I-10. It consists of one storage tank, two pressure tanks, two-booster pumps and one air compressor. The site serves two pressure zones and transfers water to the Shasta booster site.

Shasta Booster Station

This site is located about 1 mile directly south of the Andrada site. It consists of two pressure tanks and three booster pumps and one air compressor.

Golos Storage and Booster Station

This site is located just over a mile southwest of Well Site No. 2. It consists of 1 storage tank, one pressure tank and one booster pump.

Patterson Booster Station

This site is located almost two miles southwest of Well Site No. 2. It consists of three 40-gallon bladder tanks and two - 2 hp booster pumps.

South System Well & Storage Sites

	Well site 3 13555 E. Success Drive	Well site 2 Booster & Storage
ADWR ID No.	55-625703	55-625704 - Well Inactive due to low capacity and radiochemical
Pump Size	75 hp	
Pump Yield	600 gpm	
Casing Size	16	
Casing Depth	396 ft.	
Static Water Level	353 ft	
Date Drilled	11/23/79	
Meter Size	6 Inch	
Storage Tank (Gallons)	1-100,000	1-100,000 (1-40,000 abandoned)
Pressure Tanks (Gallons)	1-5,000 1-1,000 (Surge Tank)	1-5,000 1-250 (Surge Tank)
Booster Pumps & Transfer Pumps	2-25 hp	1-25hp booster 1-20 hp transfer 1-25 hp transfer 1-15 hp booster

South System Storage Sites (continued)

	Shasta Booster	Patterson Booster	Golos Booster & Storage	Andrada Booster & Storage
Storage Tank (Gallons)			1-50,000	1 – 100,000
Pressure Tank (Gallons)	2-5,000	3-40	1-3,000	1-5,000 1-3,000
Booster & Transfer Pumps	1-30 hp 1-20 hp 1-10 hp	2-2 hp	1-5 hp	2-20hp

Mains

Size	Material	Length
2"	AC	300 ft.
3"	AC	550 ft.
4"	AC &PVC	29,198 ft.
6"	PVC & AC	75,479 ft.
8"	AC & PVC	5,720 ft.
12"	AC & PVC	38,170 ft.

Meters

Size	Quantity
5/8 x ¾ "	639
1"	4
2"	1
Turbo 6"	1

Fire Hydrants	5

Structures	Chain Link Fence around all sites
1	Pump Shed
1	Office Bldg.

North System

Site R-6 Ranch Well No. 6

This site is located at the old Rancho Del Lago headquarters, the location of the water company office. The site consists of a well, storage tank, pressure tank and two transfer pumps. The two transfer pumps transfer water to the Vail Valley Ranch Storage and Booster Station northeast of this location. This site is not connected to the southern water system now. Plans are to connect it in the near future.

Vail Valley Ranch Storage and Booster Station

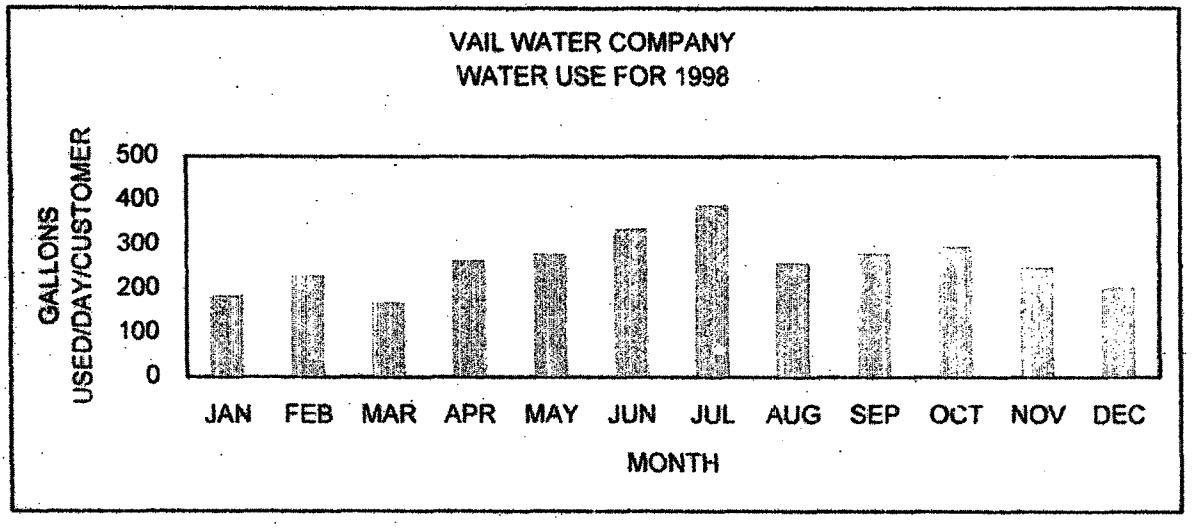
This new site will serve an area in the northern service area. The site is located northeast of the Site R-6 Ranch well. Water is supplied from Well No. 6 through 2 - 30 hp transfer pumps. The site has one 15,000-gallon storage tank, one 2,000-gallon pressure tank and two Burke 5-hp, 3 phase booster pumps. A 3,500 home community with golf course is planned in this area.

North System – Well & Storage Sites

	Site R-6 Ranch Well site 6	Vail Valley Ranch Booster & Storage
ADWR ID No.	55-087817	
Pump Size	75 hp	
Pump Yield	500 gpm	
Casing Size	14	
Casing Depth	760 ft.	
Static Water Level	422 ft.	
Date Drilled	07/24/81	
Meter Size	6 Inch	
Storage Tank (Gallons)	1- 10,000	1 – 15,000
Pressure Tanks (Gallons)	1-3,000	1 – 2,000
Booster Pumps & Transfer Pumps	2-30 hp transfer pumps	2 – 5 hp

D. WATER USE

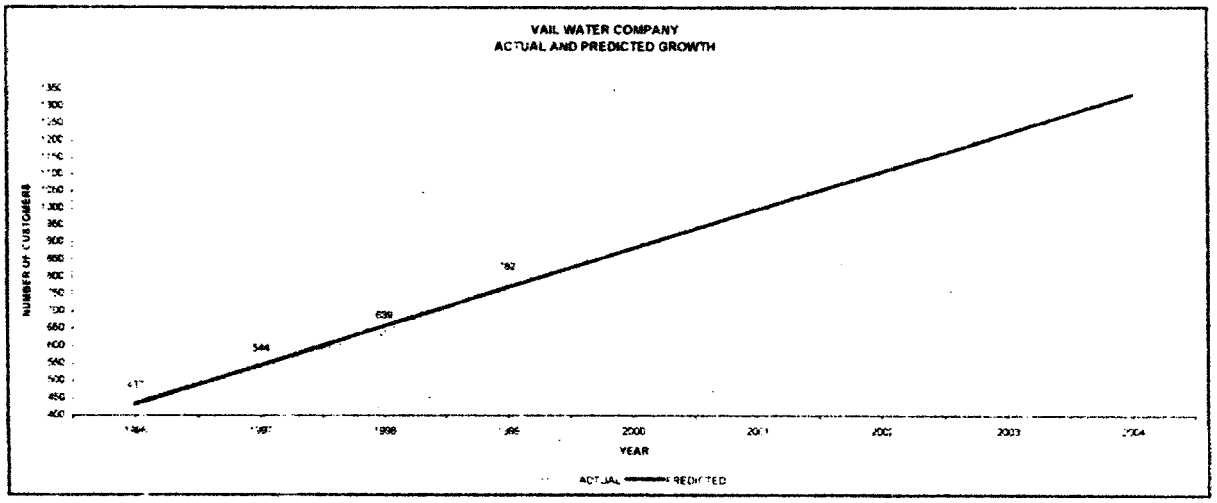
The following graph and table depicts water usage during the test year. The largest water usage occurred in June when 7,275,000, gallons were sold to 602 customers. This equates to 390 gallons per customer per day. The smallest water usage occurred in March when 2,892,000 gallons were sold to 553 customers. This equates to 169 gallons per day.



	Gallons Sold Per Month	Number of Connections	Gallons Used Per Connection Per Day	Days in Month
JANUARY	3,191,000	545	189	31
FEBRUARY	3,514,000	546	230	28
MARCH	**2,892,000**	553	**169**	31
APRIL	4,545 000	574	264	30
MAY	5,028 000	584	278	31
JUNE	5,898,000	585	336	30
JULY	**7,275,000**	602	**390**	31
AUGUST	4,845,000	606	258	31
SEPTEMBER	5,161,000	616	279	30
OCTOBER	5,759,000	630	295	31
NOVEMBER	4,758,000	638	249	30
DECEMBER	4,037,000	639	204	31
Total	**56,903,000**			
Max	**7,275,000**	**639**	**390**	
Min	**2,892,000**	**545**	**169**	
Avg	**4,741,917**	**593**	**262**	

E. GROWTH PROJECTIONS

The Company has grown from having 437 customers at the end of 1996 to 639 customers at the end of the 1998 test year. The customer count at the end of November 1999 increased to 770. This is an average growth rate of 115 customers per year over a three-year period. Based on this current growth rate, the Company could have 1,350 customers by the end of 2004. The growth rate may increase dramatically since the Company is expecting a major increase in customer growth to its north service area. Plans are under way for a large development called Rancho Del Lago. This will include at least 3,300 residences, one high school, 110 acres of commercial property, 40 acres of industrial use, and an 18 hole golf course, which will use Company water only as backup. There is also potential for substantial growth in the south service area.



F. PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY AND ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) COMPLIANCE

The Company water system is regulated under public water system PWS No.10-041. The system has no maximum contaminant level (MCL) violations and is serving water, which Pima County and ADEQ has determined meets the Safe Drinking Water Act quality standards.

G. ARIZONA DEPARTMENT OF WATER RESOURCES (ADWR) COMPLIANCE

The Company is located in the Tucson Active Management Area. It is designated as a small provider since it pumps less than 250 acre-ft per year (The Company pumped 208 acre-ft. in 1998). According to ADWR, the Company is in compliance and has met all reporting requirements.

H. OTHER

Water Loss

The company reported selling 56,903,000 gallons during the December 31, 1998 test year. The Company reported pumping 67,762,000 gallons during the same period. This resulted in a water loss of 16%. Engineering Staff (Engineering) recommends that systems try to maintain water loss of less than 10% and never more than 15%. During the last rate case, the Company reported a water loss of 14.4%. The Company should do everything possible where cost effective to reduce water loss. Some areas which can cause water loss are leaking pipes, water loss during line breaks, water theft, and customer meters that are reading too low and need replacement, or non-reporting of water used by the Company for uses such as line flushing, construction, standpipe or irrigation use. Engineering recommends that the Company reduce its water loss to less than 10% within one year of the Commission Decision. If water loss cannot be reduced to less than 10%, the Company must submit justification to the Utilities Division Director as to why doing so would not be cost effective.

Well No. 6 Original Cost Estimate

In the last rate case, Well No. 6 was considered not used and useful since it was not completed before the end of the test year and was not serving any customers. The Residential Utilities Consumer Office (RUCO) in their testimony reduced the Wells and Springs account by $91,686 which they attributed to Well No. 6. This occurred after the Company failed to provide a cost of the well due to lack of documentation. RUCO's adjustment was approved by Decision No. 61110. Well No. 6 is now serving customers and is considered used and useful. The Company has placed $91,686 back into rate base for Well No. 6. Engineering has reviewed the cost of similarly constructed wells and considers the cost reasonable.

Central Arizona Project CAP) Allocation

The Company obtained a subcontract for 786 acre-ft of CAP water in 1985. This allocation was secured as a means to reduce or eliminate the use of dwindling groundwater resources and in so doing, provide a secure long-term supply for customers. The Company has not yet used its allocation and continues to pay yearly holding costs, which were $37,728 ($48/ acre-ft.) in 1999. These costs have not been recovered in rates because the allocation has not been considered "used and useful" to the customers.

One of the main reasons that the Company has not used its CAP allocation is that no means for delivering the allocation to the southern area of the Tucson Active Management Area (AMA) is available. The Company is proposing to join a replenishment district to receive credits for its CAP allocation, which it can then withdraw on-site. The CAP water will actually be recharged at a remote location 60 miles from Vail, but within the same AMA. The following is excerpted from a draft Tucson AMA Arizona Water Management Task Force document and provides a explanation about the current Assured Water Supply program in the Tucson AMA.

"The Assured Water Supply Rules (AWS) require that all new municipal groundwater users be on renewable supplies. To accomplish this, water providers can choose to have an AWS designation that allows them to serve new subdivisions. If a provider chooses not to have a designation, developers of new subdivisions within the provider's service area are required to obtain a certificate of assured water supply.

One way that providers and developers can utilize a renewable supply is to join the Central Arizona Groundwater Replenishment District CAGRD. The CAGRD recharges renewable water to replace the groundwater that is used by member service areas (designated providers) and member lands (certified subdivisions). The replenishment of the groundwater may be done anywhere within the same AMA as the member service area/land and may be done within three years of the groundwater pumpage. Currently in the Tucson AMA, all designated providers and certificated subdivisions rely on the CAGRD to prove their assured water supply.

Because the CAGRD is allowed to replenish anywhere within the AMA of the member service area/lands, there is often no hydrologic connection between the groundwater pumpage and the replenishment areas. Recharge facilities are not available within most municipal service areas and infrastructure does not exist to transport renewable supplies to the outlying, rapidly growing portions of the metropolitan areas. Because of this, designated providers/certificated subdivisions, may develop physical availability problems over time as the underlying aquifers are depleted and are disconnected from replenishment."

This groundwater savings facilities mechanism is authorized in the recharge statutes §A.R.S. 45-801 et., Seq. This program works only where sufficient groundwater is available at the point of use. ADWR, in a letter written by Steve Rossi, Manager of the Office of Assured Water Supply dated September 22, 1999, indicates that this is the case with Vail.

The Company is proposing to have its CAP water recharged near Redrock at the Kai-Picacho Groundwater Savings Facility in the northern portion of the Tucson AMA (sections 13 and 24 of T9S R9E and Sections 18,19,20,29,and 30 of T9S R10E). This is about 60 miles northwest of Vail. The water will be delivered directly to Kai farm for agricultural purposes. The water is used in place of groundwater, which would otherwise be used at the farm. This will avoid the costs of transmission systems to convey the water to Vail. Vail would be allowed to withdraw its allocation credits from a well designated by ADWR within the Vail CC&N. According to the Company, this water will initially serve existing customers north of Colossal Road as well as provide backup water for a planned golf course. The golf course will normally use surface water not owned by the Company. The recharge program will also provide the necessary AWS designation for a development of 3,300 homes, a high school, 110 acres of commercial development and 40 acres of industrial development. As soon as an interconnection is completed between the north and south systems, the CAP credit will apply to all customers.

Engineering has a number of concerns with the Company's replenishment proposal.

1. The replenishment district where Vail will recharge its CAP allocation is located 60 miles from the Vail CC&N. This will not provide any direct benefit to Vail customers. Over time, increased groundwater withdrawal coupled with increased surface water withdrawal may have a negative impact on the aquifer under Vail.

2. During the 1998 test year, the existing customers of Vail used 174.5 Acre-ft (56,903,000 gallons) of water. This means the CAP allocation is approximately 4.5 times larger than the amount of water the existing customers used in the test year. The existing customers should not have to pay for the entire CAP allocation.

3. The Company has not presented any long term plans to directly use its CAP allocation within the Company CC&N.

Engineering believes that it is important that the Company retains its CAP allocation as long as it is eventually delivered directly to Vail customers. This can only take place after an infrastructure is built within the Tucson AMA that will allow for the transport of CAP to the Vail CC&N. In the interim, Vail should be allowed to recharge its allocation at a remote location within the Tucson AMA and recover the associated costs. The costs related to the CAP allocation should be shared by all current and future ratepayers. In order to facilitate the Company's interim plan, Engineering proposes the following two-prong cost recovery mechanism:

1. Implementation of a CAP Service fee based on customer usage; and
2. Implementation of a CAP Hookup Fee for all new line extensions and subdivisions

Background Information

Vail CAP Allocation	786 acre-ft
Yearly Growth Rate	115 customers/year
Company Estimated Yearly CAP Costs	$84,888 ($37,728 Holding Costs, $47,160 M & I)
Gallons Sold Test Year	56,903,000
Customers in Test Year	639

1. Proposed CAP Service Fee

Engineering proposes that all customers should contribute to the utilization of CAP water. It recommends that a CAP service charge or fee per 1,000 gallons be charged. This service fee shall apply to all customers on the north system from the date of the order. Once the south and north systems are interconnected, the service fee would apply to all customers.

2. Proposed CAP Hookup Tariff

Conditions of Implementation of Hookup Tariff

1. This tariff would apply to all new subdivisions and line extension agreements that are approved for the north system from the end of the 1998 test year forward. This includes the proposed Rancho Del Lago Development. This development, according to the Company, will have an estimated 3,300 residential customers, one high school, an 18 hole golf course, 110 acres of commercial development, and 40 acres of industrial use. Once the interconnect is completed between the north and south systems, the tariff would also apply to all new subdivisions and line extensions agreements in the combined north and south system.

2. The Company must be recharging CAP water within six months of the Commission's Decision.

3. All CAP hookup fees and CAP service fees are to be placed in a separate interest bearing account.

4. Revenue collected for the CAP Hookup Fee and CAP Service Fee can only be used for payment of the CAP holding fee and the Municipal and Industrial (M&I) cost.

5. The CAP Service Fee shall be identified as a separate line item charge on customer bills.

6. Final Plans for the direct use of CAP water within the Company is CC&N territory are to be submitted to the Commission no later than December 31, 2010.

7. The Company must directly use the CAP allocation within its CC&N territory by December 31, 2015.

8. No time extensions will be allowed for any reason.

9. The Company shall submit annual reports to the Utilities Division Director detailing the process of plans to use CAP water directly in its CC&N territory and plans for actual construction of any necessary facilities. The reports shall be submitted each July 1, beginning in 2001.

10. If the Company does not comply with either of the timeframes in items #6 or #7, all CAP charges will cease at that time and any monies remaining in the CAP account shall be refunded in a manner to be determined by the Commission at that time.

11. The Commission Decision granting the CAP charges shall allow Staff to automatically impose fines and/or other sanctions against the Company if the timeframes in item #6 or #7 are not met.

12. If the Company does not comply with the timeframes in item #6 or #7 and it sells its CAP allocation, any net profit shall be distributed to the customers in a manner to be determined by the Commission.

13. Vail Water Company should submit annual reports regarding the amount of CAP Hook-up Fee and CAP Service Fee collected. The report should be submitted by each January 31 and cover the previous calendar year. The first report should be submitted by January 31, 2001. The report should contain the following information.

    1. The name of each entity paying a CAP Hook-up Fee.
    2. The amount of CAP Hook-up Fee each entity paid.
    3. The amount of CAP Service Fee collected.
    4. The balance in the CAP trust account.
    5. The amount of interest earned in the CAP trust account.
    6. The amount of money spent from the CAP trust account.
    7. A description of what was paid for with monies from the CAP trust account.

CAP Hookup Fee Schedule

Meter Size	CAP Hookup Fee
5/8" x ¾"	$1,000
¾ "	$1,500
1 "	$2,500
1 ½ "	$5,000
2 "	$8,000
3 "	$17,500
4 "	$30,000
6"	$62,500
8"	$120,000
10"	$190,000
12" or larger	$250,000

A sample hookup fee tariff is attached to this report. (Attachment A)

Possible Methods for Direct Use of CAP Water

1. Pay City of Tucson to treat CAP water. The Company would take delivery through the southern part of the Tucson distribution system.
2. Pipe raw CAP water to Vail. Recharge into a dry creek bed or use on the golf course.
3. Pipe CAP water to Vail. Treat the water and deliver it to customers.
4. Join a recharge district located so there would be a direct hydrologic benefit to the groundwater in the Vail area.

Major Plant Upgrades and New Construction Financing

The Company is requesting approval of financing for $819,000 to pay for new construction and upgrades to the water system. This financing is being sought from the Water Infrastructure Financing Authority (WIFA). These improvements include the following:

Project Description	Estimated Cost
Build Chlorination Facility at Well No. 6	$81,000
Rebuild Andrada Booster Station	$85,000
Water Plant No. 2 - Booster Station &Transfer Station Upgrade	$161,000
Install 6,700 of 12-inch distribution piping to upgrade from six inch	$192,000
Build interconnection between north and south systems from Well No. 6 - 6,000 feet of 12-inch main including Pantano Wash crossing.	$300,000
Total	**$819,000**

Engineering considers the projects presented in the Company's application to be necessary and important to improving the reliability and quality of service to all customers. The analysis was based on the alternatives submitted by the Company. No other alternatives were analyzed by Engineering.

Engineering recommends that a surcharge, set aside or something similar be approved which will provide debt service for the construction projects. This charge should reflect the actual cost of providing service to each class of customer, i.e. those customers with larger meters should pay a proportionately higher amount. This charge should be placed in a separate interest bearing account that could only be used to pay off this financial debt.

Water Testing Costs

The following table lists the monitoring and reporting costs Engineering Staff estimates the Company may incur over the next three years. It does not take into account the possibility that the Company may exceed a maximum contaminant level and therefore have to repeat sampling. The Monitoring and Assistance Program (MAP) is operated by ADEQ for all systems serving less than 10,000 people. Annual fees are assessed based on the number and size of connections. ADEQ performs all water testing for the system, except for the tests listed below. These tests are still the direct responsibility of the Company. Engineering estimates a cost of $3,662 per year for the next three years for water testing costs.

MONITORING	COST ($) PER TEST	TOTAL 3 YEAR COST ($)	COST ($) PER YEAR
Bacteriological	15	2,160	720
Primary & Secondary Inorg.	184	368	123
Radiochemical			
Gross Alpha 4 (YR)	50	75	25
Radium 226 & Radium 228	170		
Nitrate – Annual	12	96	32
Nitrite – Annual	12	96	32
Asbestos – One (9 YR.)	180	120	40
Lead & Copper	20	1,200	400
Monitoring Assistance Program		6,870	2,290
TOTALS		$10,985	$3,662

Attachment A

TARIFF SCHEDULE

UTILITY: Vail Water Company SHEET NO. 1

DOCKET NO. W- DECISION NO.

EFFECTIVE DATE:

Central Arizona Project Hook-Up Fee Tariff

I. Applicability

In addition to the meter and service line installation charge, any other tariff necessary for connection to the system, and requirements for on-site facilities to be installed pursuant to approved main extension agreements, the following Central Arizona Project (CAP) Hook-Up Fee is applicable to all new service connections in the Company's North System requiring main extension agreements as of January 1, 1999, or later. The CAP Hook-up Fee shall be applicable to the South System in the same manner, once the North and South Systems are interconnected.

II. Definitions

"Applicant" means any party entering into an agreement with Company for the installation of water facilities to serve new service connections.

"Company" means Vail Water Company, an Arizona corporation.

"Main Extension Agreement" means any agreement whereby an applicant agrees to advance the costs of the installation of water facilities to the Company to serve new service connections, or install water facilities to serve new service connections and transfer ownership of such water facilities to the Company, which agreement shall require the approval of the Arizona Corporation Commission (same as line extension agreement).

"Service Connection" means and includes all service connections for single-family residential or other uses, regardless of meter size.

III. Central Arizona Project Hook-up Fee

Each new service connection shall pay the total CAP Hook-up Fee derived from the following table:

OFF-SITE FACILITIES HOOK-UP FEE TABLE		
Meter Size	**Size Factor**	**Total Fee**
5/8" x ¾"	1	$ 1,000
¾"	1.5	$ 1,500
1"	2.5	$ 2,500

1- ½ "	5	$ 5,000
2"	8	$ 8,000
3"	17.5	$ 17,500
4"	30	$ 30,000
6"	62	$ 62,000
8"	120	$120,000
10"	190	$190,000
12" or larger	250	$250,000

IV. Terms and Conditions

(A) Assessment of One Time Hook-up Fee: The Hook-up fee may be assessed only once per parcel, service connection, or lot within a subdivision (similar to meter and service line installation charge)

(B) Use of Hook-up Fee: Hook-up fees may only be used to pay for Central Arizona Project M&I and holding charges. Hook-up fees shall not be used for any other expenses, maintenance, or operational purposes.

(C) Time of Payment: In addition to the amounts to be advanced pursuant to an Arizona Corporation Commission approved main extension agreement, the applicant for new water services shall pay the Company the CAP Hook-up Fee as determined by meter size and number of connections to be installed pursuant to the main extension agreement. Payment of the CAP Hook-up Fee shall be made at the time of payment of the main extension agreement.

(D) CAP Hook-up Fee Non-refundable: The amounts collected by the Company pursuant to the CAP Hook-up Fee shall be contributions in aid of construction.

(E) Trust Account: All funds collected by the Company as CAP Hook-up Fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs as stated in (B) above.

(F) Hook-up Fee in Addition to On-site Facilities: The CAP Hook-up Fee shall be in addition to any costs associated with a main extension agreement for on-site facilities.

(G) Disposition of Excess Funds: The Cap Hook-up Fee Tariff may be terminated by order of the Arizona Corporation Commission (Commission) for the Company's non-compliance with any Commission rules and/or orders. Any funds remaining in the CAP trust account shall be refunded in a manner to be determined by the Commission at the time the CAP Hook-up Fee Tariff is terminated by the Commission.

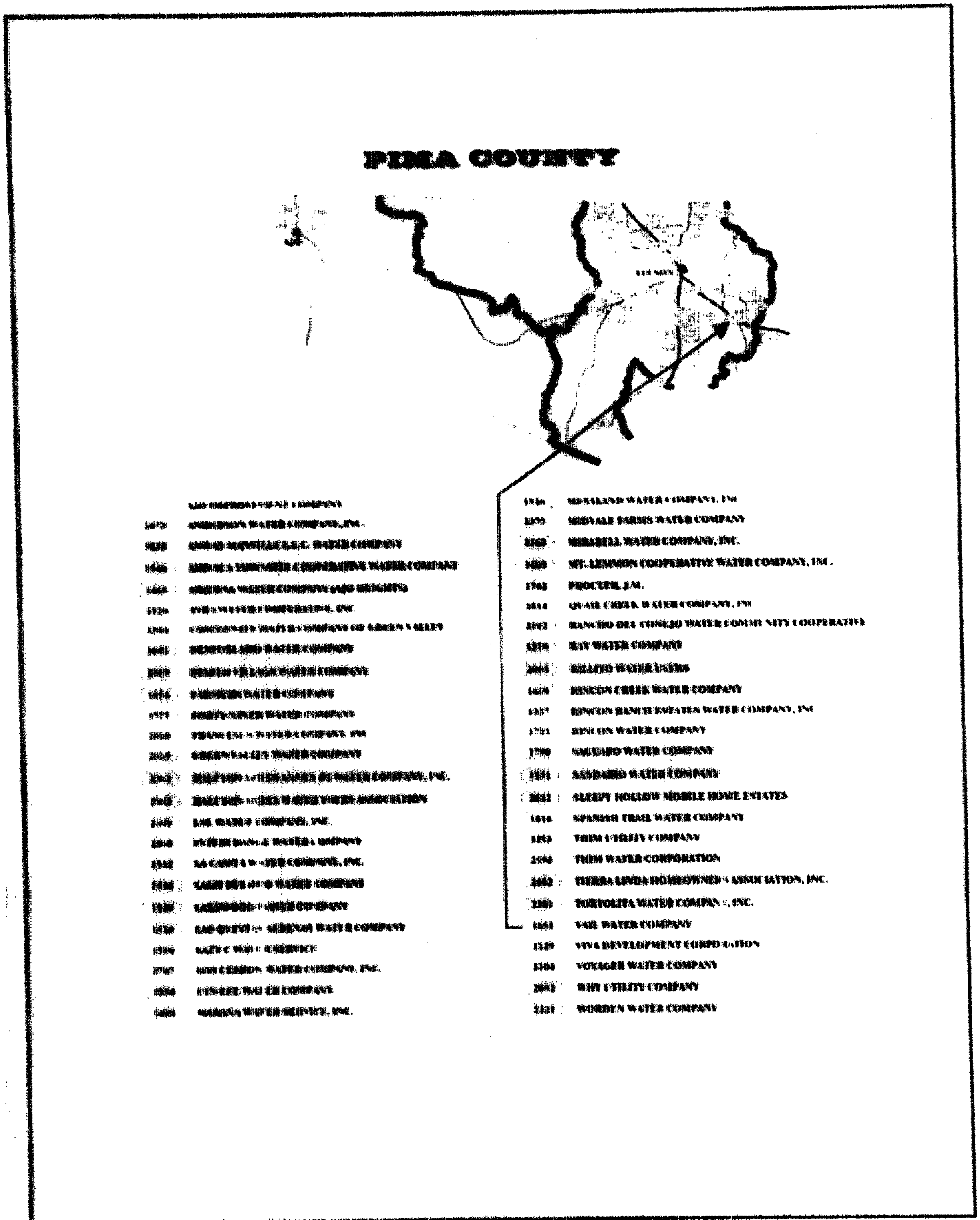

PIMA COUNTY
MIDVALE FARMS WATER COMPANY
MIRABELL WATER COMPANY, INC.
MT. LEMMON COOPERATIVE WATER COMPANY, INC.
PROCTER, J.M.
RAY WATER COMPANY
RINCON CREEK WATER COMPANY
RINCON WATER COMPANY
SAGUARO WATER COMPANY
SLEEPY HOLLOW MOBILE HOME ESTATES
SPANISH TRAIL WATER COMPANY
THIM WATER CORPORATION
VAIL WATER COMPANY
VOYAGER WATER COMPANY
WORDEN WATER COMPANY

Figure 1

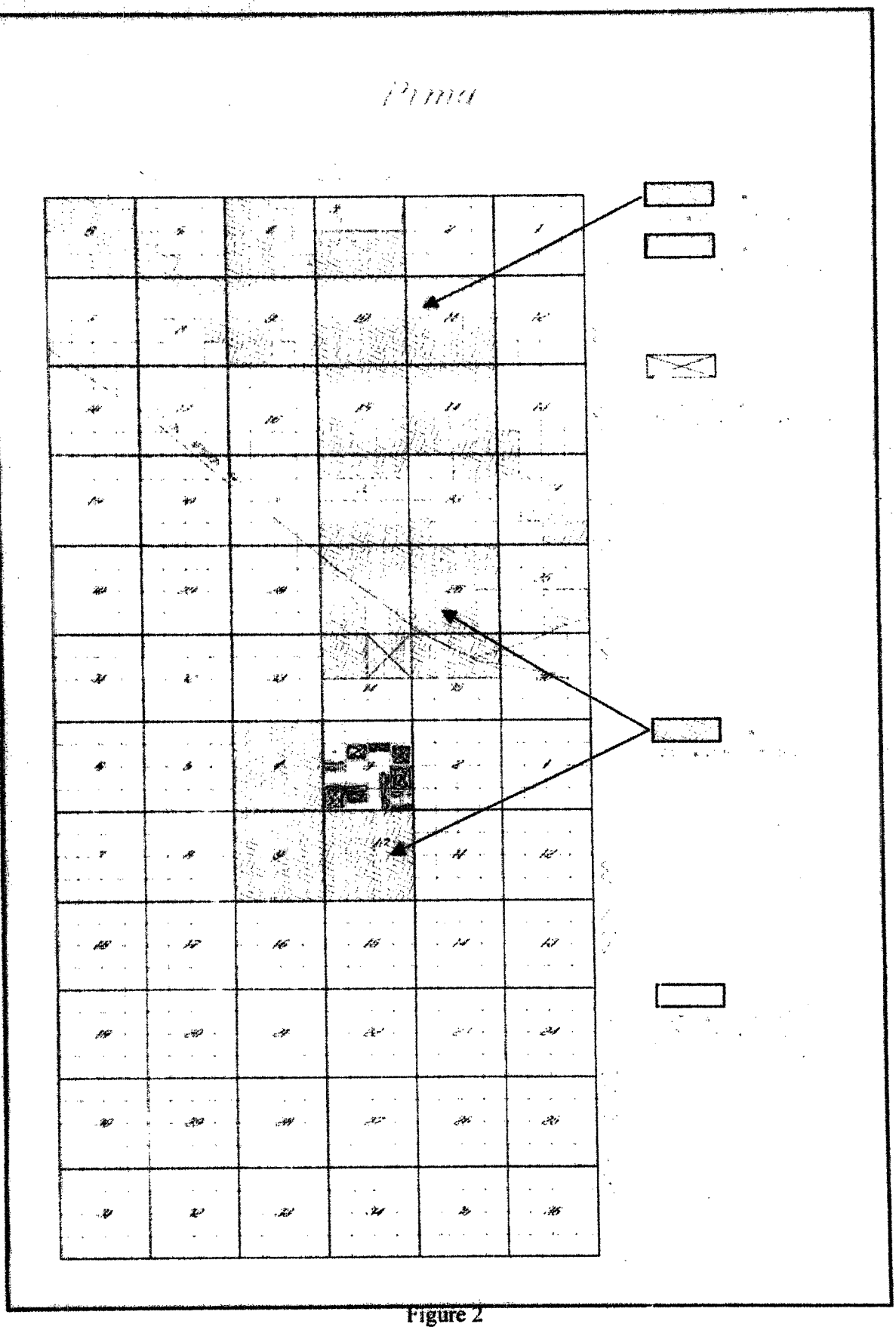
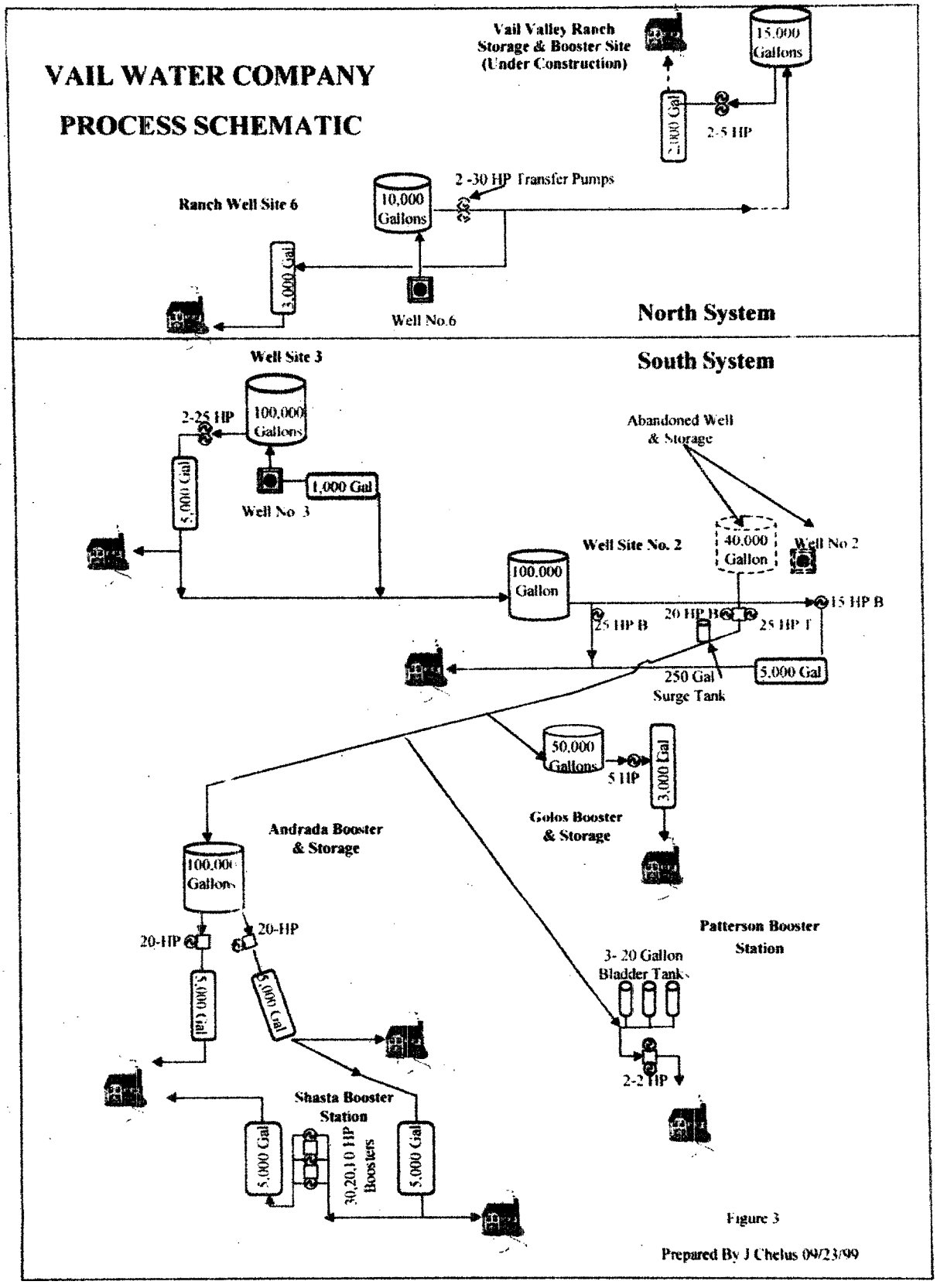


Figure 2


VAIL WATER COMPANY
PROCESS SCHEMATIC
Vail Valley Ranch
Storage & Booster Site
(Under Construction)
15,000
Gallons
3,000 Gal
2-5 HP
2 -30 HP Transfer Pumps
Ranch Well Site 6
10,000
Gallons
3,000 Gal
Well No.6
North System
South System
Well Site 3
2-25 HP
100,000
Gallons
5,000 Gal
1,000 Gal
Well No 3
Abandoned Well
& Storage
Well Site No. 2
40,000
Gallon
Well No 2
100,000
Gallon
15 HP B
25 HP B
20 HP B
25 HP T
5,000 Gal
250 Gal
Surge Tank
50,000
Gallons
5 HP
3,000 Gal
Golos Booster
& Storage
Andrada Booster
& Storage
100,000
Gallons
20-HP
20-HP
5,000 Gal
5,000 Gal
Patterson Booster
Station
3- 20 Gallon
Bladder Tanks
2-2 HP
Shasta Booster
Station
5,000 Gal
30,20,10 HP
Boosters
5,000 Gal
Figure 3
Prepared By J Chelus 09/23/99